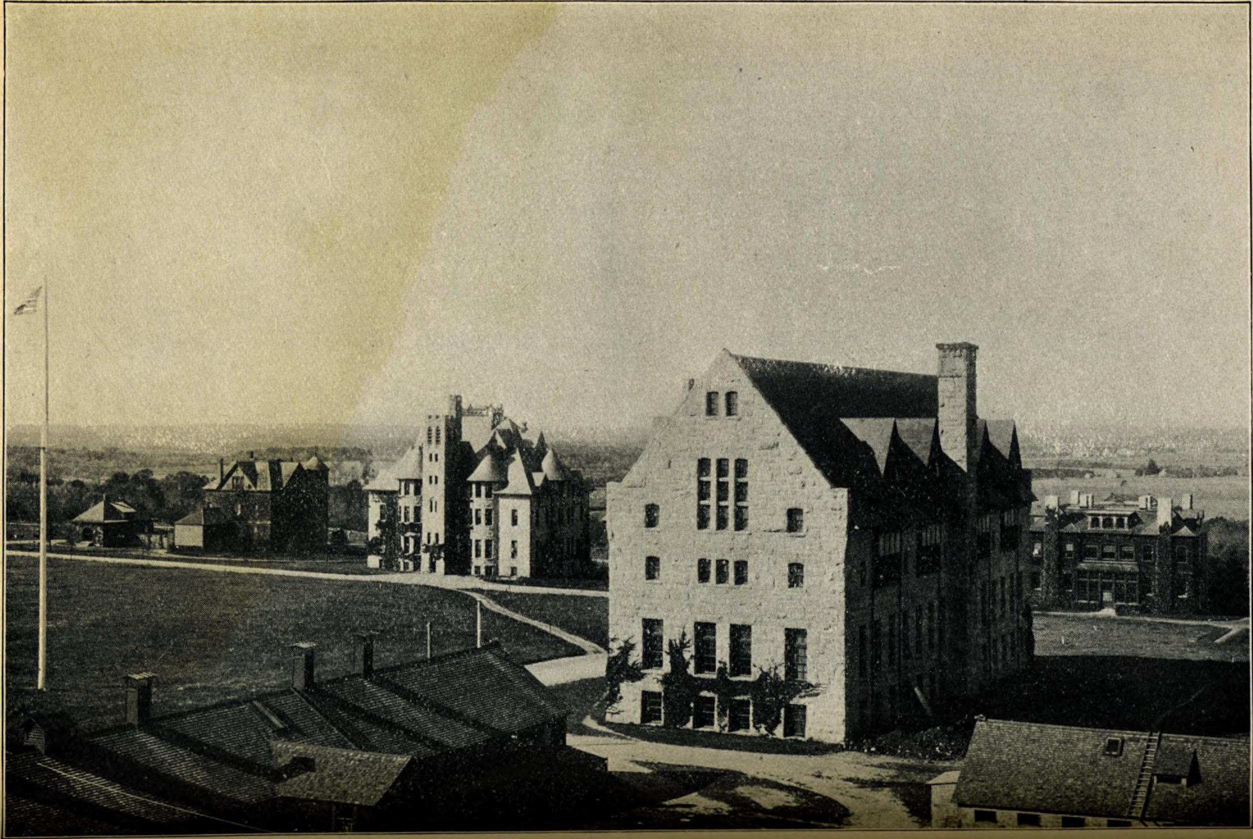

GENERAL VIEW OF MAIN BUILDINGS.

NINETEENTH ANNUAL REPORT

OF THE

Corporation, Board of Managers

OF THE

Rhode Island College of Agriculture and Mechanic Arts,

MADE TO THE

General Assembly at its January Session, 1907.

PART III—CATALOGUE.

Part I—General Report—is printed under separate cover.

Part II—Experiment Station Report—is printed under separate cover.

Providence, R. I.
E. L. Freeman Company, State Printers.
1907.

Rhode Island College of Agriculture and Mechanic Arts.

Corporation.

Hon. ROBERT S. BURLINGAME	Newport County.
Hon. C. H. COGGESHALL	Bristol County.
Hon. CHARLES DEAN KIMBALL	Providence County.
Hon. THOMAS G. MATHEWSON	Kent County.
Hon. J. V. B. WATSON	Washington County.

Officers of the Corporation.

Hon. CHAS. DEAN KIMBALL, President	P. O., Providence, R. I.
Hon. C. H. COGGESHALL, Clerk	P. O., Bristol, R. I.
Hon. C. H. COGGESHALL, Treasurer	P. O., Bristol, R. I.

Report.

To His Excellency James H. Higgins, Governor, and the Honorable General Assembly of the State of Rhode Island and Providence Plantations, at its January Session, 1907:

I have the honor to submit herewith Part Three of the Nineteenth Annual Report of the Board of Managers of the Rhode Island College of Agriculture and Mechanic Arts, as required by law.

CHARLES DEAN KIMBALL,

President of the Board of Managers of the Rhode Island College of Agriculture and Mechanic Arts.

Faculty and Other Officers.

HOWARD EDWARDS, A. M., LL. D.,

PRESIDENT.

Professor of Political Economy and Social Science,

A. M., Randolph-Macon College, 1876; Student, University of Leipzig, 1877–1878; Student in Paris, 1878; Teacher, Bethel Academy, Virginia, 1878–1880; Teacher, Bingham School, North Carolina, 1880–1882; Acting Principal of Bethel Academy, Virginia, 1882–1884; Principal, Tuscumbia Academy, Alabama, 1884–1885; Professor of English and Modern Languages, University of Arkansas, 1885–1890; Professor of English and Modern Languages, Michigan Agricultural College, 1890–1906; LL. D., University of Arkansas, 1891; Leave of absence in France and England, 1891–1892; Entered upon duties as President, July 1, 1906.

HOMER JAY WHEELER, PH. D.,

Professor of Geology and Agricultural Chemistry

B. S., Massachusetts Agricultural College, 1883; Assistant Chemist, Massachusetts State Experiment Station, 1883–1887; Graduate student, University of Göttingen, 1887–1889; Ph. D., Göttingen, 1889; Appointed Chemist of Rhode Island Agricultural Experiment Station and Professor of Geology, 1890; Acting President, August 15, 1902–April 1, 1903.

E. JOSEPHINE WATSON, A. M.,

Professor of Languages.

A. B., Smith College, 1882; A. M., Cornell University, 1883; Assistant in English, Smith College, 1883–1887; Student of North European Languages in Göttingen, 1887–1889; Appointed Professor of Languages, September, 1892; Student of French in Tours, summer of 1895.

WILLIAM ELISHA DRAKE, B. S.,

Professor of Mechanical Engineering,

B. S., Polytechnic Institute, Worcester, 1886; Instructor in Physics and Electricity, Worcester Polytechnic Institute, 1887; Instructor in Woodworking at Pratt Institute, Brooklyn, 1887–1893; Appointed Professor of Mechanical Engineering, 1893.

HARRIET LATHROP MERROW, A. M.,

Professor of Botany and Secretary of the Faculty,

B. S., Wellesley College, 1886; Teacher of Science, Plymouth (Mass.) High School, 1887–1888; Teacher of Science, Harcourt Place, Gambier, O., 1888–1891; Graduate student, University of Michigan, 1891–1892; A. M., Wellesley College, 1893; Graduate assistant, Botanical Laboratory, University of Michigan, 1893–1894; Appointed Professor of Botany, January, 1895.

FRED WALLACE CARD, M. S.,*

Professor of Agriculture,

B. S., Cornell University, 1892; M. S., Cornell University, 1893; Assistant Horticulturist, Cornell University Experiment Station, 1893; Associate Professor of Horticulture, University of Nebraska, 1893–1898; Appointed Professor of Horticulture, 1898.

COOPER CURTICE, D. V. S., M. D.,†

Professor of Animal Husbandry,

B. S., Cornell University, 1881; D. V. S., Columbia Veterinary College, N. Y., 1883; M. D., Columbian University, Washington, D. C., 1887; Assistant Paleozoic Paleontologist, U. S. Geological Survey, 1883–1886; Specialist, Department of Agriculture, Washington, D. C., 1886–1892; Veterinarian, State Board of Health, N. Y., 1892–1894; Tuberculosis Specialist, U. S. Department of Agriculture, Washington, D. C., 1895–1896; Professor of Zoölogy, North Carolina College of Agriculture and Mechanic Arts, 1898; State Veterinarian, North Carolina, 1899; Appointed Professor of Zoölogy, 1900; Professor of Animal Husbandry, 1902.

VIRGIL LOUIS LEIGHTON, PH. D.,

Professor of Chemistry,

A. B., Tufts College, 1894; A. M., Kansas State University, 1895; Ph. D., Tufts College, 1897; Instructor in Organic Chemistry, Tufts College, 1897–1901; Appointed Associate Professor of Chemistry, 1901; Professor, 1903.

JOHN BARLOW, A. M.,

Professor of Zoölogy,

B. S., Middlebury, 1895; A. M., Brown University, 1896; Assistant Biologist, R. I. Experiment Station, 1898; Professor of Biology, Fairmount College, 1898–1901; Appointed Professor of Zoölogy, 1901.

GILBERT TOLMAN, A. M.,

Professor of Physics and Electrical Engineering,

B. M. E., University of Maine, 1896; Instructor in Physics and Physical Geography, Shaw University (Raleigh, N. C.), 1896–1900; A. M., Columbia University (New York City), 1901; Assistant, Department of Physics, Columbia University, 1901–1903; Appointed Professor of Electrical Engineering, 1903.

MARSHALL HENRY TYLER, B. S.,

Professor of Mathematics,

B. S., Amherst College, 1897; Instructor at St. Mark's, 1897–1898; Appointed Master of the Preparatory School, 1898; Professor of Mathematics, 1906.

**Resigned. Resignation to take effect July* 1.

†*Leave of absence August* 15 *to December* 1, 1906. *Resigned. Resignation to take effect April* 1.

FINGAL CONWAY BLACK, C. E.,*

Professor of Highway Engineering and Instructor in Military Science and Tactics,

B. S., South Carolina Military Academy, 1890; Graduate student, University of Chicago, 1902; C. E., Scio College, 1904; General Engineering Practice, 1890–1897; County Engineer, Spartanburg County, S. C., 1897–1898; First Lieutenant, Third U. S. V. Engineers, 1898–1899; Consulting Engineer, Spartanburg, S. C., 1899–1901; City Engineer, Spartanburg, S. C., 1901–1902; Consulting Engineer, Chicago, Ill.. 1903; Professor of Civil Engineering, Scio College, 1904–1905; Professor of Civil Engineering, Indiana College of Applied Science, 1905–1906; Appointed Professor, 1906.

GEORGE EDWARD ADAMS, B. S.,

Professor of Agriculture,

B. S., R. I. College of Agriculture and Mechanic Arts, 1894; Student, Cornell University, 1897 and 1899–1900; Assistant in Horticulture, Rhode Island Experiment Station, 1895–1901; Assistant Agriculturist, Rhode Island Experiment Station, 1901–1906; Associate, Agronomy, 1906; State Statistical Agent, U. S. Department of Agriculture, 1901; Appointed Professor of Agriculture, 1907.

JOHN WILLARD BOLTÉ, B. S.,

Assistant Professor of Animal Husbandry,

B. S., Michigan Agricultural College, 1905; Instructor in Animal Industry and Poultryman, Utah Agricultural College and Experiment Station, 1905–1906; Appointed Assistant Professor of Animal Husbandry 1906; Professor in charge of department in absence of Dr. Curtice.

THOMAS CARROLL RODMAN,

Instructor in Woodwork,

Appointed, 1890.

MABEL DEWITT ELDRED, B. S.,

Instructor in Drawing,

B. S., R. I. College of Agriculture and Mechanic Arts, 1895; Appointed Instructor in Drawing, 1897.

ELIZABETH WATSON KENYON, A. M.,†

Instructor in Languages and History,

B. S., Mt. Holyoke College, 1896; A. M., Brown University, 1897; Instructor in English and History, Middleborough (Mass.) High School, 1898–1900; Appointed Instructor in Languages and History, 1900.

**Resigned. Resignation to take effect September* 1.

†*Leave of absence for the year* 1906–1907.

BESSIE DEAN COOPER, Ph. B.,

Instructor in Languages and History,

Ph. B., Cornell University, 1897; Teacher of History, St. Mary's Hall, Burlington, N. J. 1898–1900; Bishopthorpe School, South Bethlehem, Pa., 1900–1902; High School, Berlin N. H., 1902–1905; Graduate student, Yale University, 1905–1906; Appointed Instructor in Languages and History, 1906.

ANDREW EDWARD STENE, M. S.,

Superintendent of College Extension,

B. S., University of Minnesota, 1897; Principal of Schools, Ashby (Minn.), 1897–1901; M. S., Cornell University, 1902; Appointed Assistant in Horticulture, 1903; Appointed Superintendent of College Extension, 1904.

HOWLAND BURDICK, B. S.,

Instructor in Dairying and Farm Superintendent,

B. S., R. I. College of Agriculture and Mechanic Arts, 1895; Appointed Assistant in Agriculture, 1896; Appointed Instructor in Agriculture and Farm Superintendent, 1900; Appointed Instructor in Dairying, 1906.

WALTER SHELDON RODMAN, B. S.,

Instructor in Physics and Electrical Engineering,

B. S., R. I. College of Agriculture and Mechanic Arts, 1904; Appointed Instructor in Physics and Electrical Engineering, 1904.

LILLIAN EDNA TOLMAN,

Instructor in Stenography and Typewriting,

Appointed, 1905.

KATHLEEN SENTON, A. B.,

Instructor in Languages,

A. B., Oberlin College, 1905; Teacher of Mathematics and Science, St. John Baptist School, New York City, 1905–1906; Appointed Instructor in Languages, 1906.

GEORGE LESLIE BIDWELL, B. S.,

Instructor in Chemistry,

B. S., Tufts College, 1905; Assistant in Chemistry, Tufts College, 1904–1905; Appointed Instructor in Chemistry, 1906.

JOHN EDWARD SCHAEFER, B. S.,

Instructor in Horticulture,

B. S., Michigan Agricultural College, 1905; Special Agent, U. S. Department of Agriculture Washington, D. C., 1903–1904; Scientific Assistant, U. S. Department of Agriculture, 1906; Appointed Instructor in Horticulture, 1906.

THOMAS ALFRED CHITTENDEN, B. S.,

Instructor in Ironwork,

B. S., Michigan Agricultural College, 1898; With McIntosh and Seymour Engine Co., Auburn, N. Y., 1898–1899; Student, New York State Normal School, Albany, 1899–1900; Instructor in Mechanical Drawing, North Carolina College of Agriculture and Mechanic Arts, 1900–1904; Instructor in Manual Training and Drawing, Indiana University. 1904–1906; Appointed Instructor in Ironwork, 1906.

JOHN FRANKLIN KNOWLES, B. S.,

Assistant in Woodwork,

B. S., R. I, College ot Agriculture and Mechanic Arts, 1894; Appointed Assistant in Woodwork, 1894.

LILLIAN MABELLE GEORGE, B. S.,

Librarian,

B. S., R. I. College of Agriculture and Mechanic Arts. 1899; A. B. in Library Science, University of Illinois; Appointed Librarian, 1899.

LUCY COMINS TUCKER,

Secretary to the President.

JENNIE ELIZABETH FRANCIS,

Bookkeeper.

SARAH B. BREED,

Matron of the Boarding Hall.

Lecturers.

Poultry Course, 1907.

I. K. Felch, Natick, Mass., STANDARD POULTRY, JUDGING, AND JUDGING PRACTICE. One week.

A. F. Hunter, Abington, Mass., EGG PRODUCTION AND MARKET POULTRY. Four lectures.

J. Alonzo Jocoy, Wakefield, R. I., BROILERS AND EGG PRODUCTION. Two lectures.

D. J. Lambert, Apponaug, R. I., HOW TO ESTABLISH A BUSINESS, AMERICAN BREEDS. Five lectures.

V. L. Leighton, Kingston, R. I., FIVE YEARS' ACCOUNTS OF THE POULTRY YARD. One lecture.

John Maloney, Boston, Mass., DEMONSTRATIONS OF PICKING AND DRESSING POULTRY. Two days.

W. D. Rudd, Boston, Mass., THE POULTRY MARKET. One lecture.

E. Collins Tefft, Wakefield, R. I., NATURAL INCUBATION, ASIATIC BREEDS. Two lectures.

Thomas Wright, South Sudbury, Mass., SQUAB RAISING. Four lectures.

C. K. Graham, Conn. Agr. College, Storrs, Conn., MARKET FOWLS AND MARKETING. One lecture.

THE EXPERIMENT STATION.

Experiment-Station Council.

Howard Edwards, A. M., LL. D.	President of the College. *Ex-officio* Member.
H. J. Wheeler, Ph. D.	Director, Chemistry and Agronomy.
Fred W. Card, M. Sc.	Horticulture.
Leon J. Cole,* Ph. D.	Animal Breeding and Pathology.
Burt L. Hartwell, Ph. D.	Associate, Chemistry.
George E. Adams, B. Sc.	Associate, Agronomy.
W. F. Kirkpatrick, B. Agr., B. E.	Asst., An'l Breeding and Pathology.
J. Willard Bolté, B. Sc.	Assistant, Animal Feeding.
P. H. Wessels, B. Sc.	Assistant, Chemistry.
S. C. Damon, B. Sc.	Assistant, Agronomy.
F. R. Pember, B. Sc.	Assistant, Plant Physiology.

Other Members of the Station Staff.

J. Frank Morgan, A. M.	Assistant, Chemistry.
H. S. Hammond, B. S. A.	Assistant, Chemistry.
L. F. Whipple	Assistant, Chemistry.
Nathaniel Helme	Meteorology.
Beulah A. Hoitt	Stenographer and Accountant.
E. Elizabeth Meears	Stenographer and Librarian.

The publications of the station will be mailed free, upon request, to all residents of Rhode Island to whom they are of interest. Suggestions as to how the station can aid the state are gladly received. Visitors are always welcome. Railway station, telegraph, express, and post-office—Kingston, Rhode Island. Long distance telephone, Narragansett Pier Exchange.

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*Also expert in the Bureau of Animal Industry, U. S. Department of Agriculture. Engaged in coöperative work between the Bureau and the station.

†Agent, Bureau of Animal Industry, U. S. Department of Agriculture. Engaged in coöperative work between the Bureau and station.

CALENDAR.

1907.

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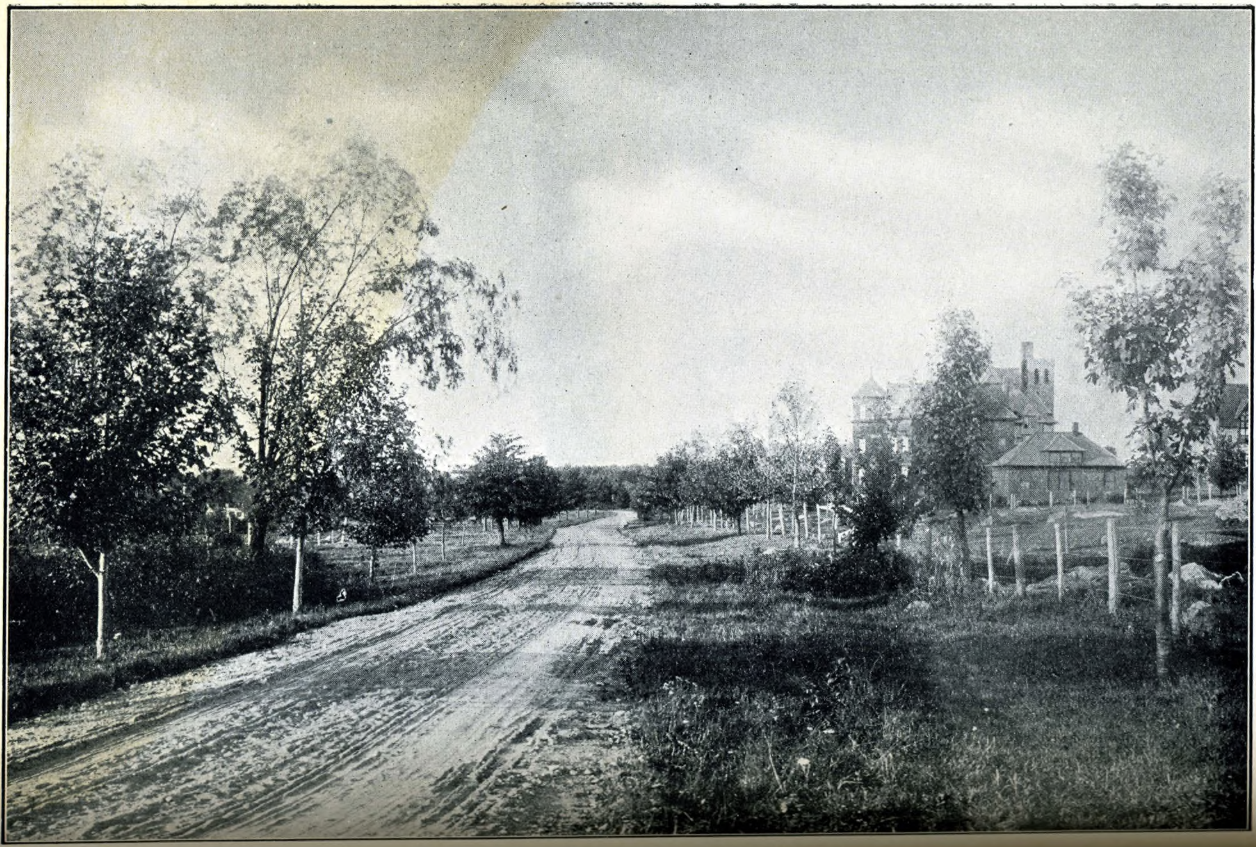
College Calendar.

1907-8.

Tuesday, September 10, 1907	Chapel Exercises, 8:30 A. M.
	Registration, examination of entering and conditioned students, 9 A. M.
Wednesday, September 11	Recitations begin 9 A. M.
Tuesday, November 5	Election Day.
Wednesday, November 27, 12 M., Tuesday, December 3, 8:30 A. M.,	Thanksgiving Recess.
December 20, 5 P. M., January 2, 1908, 8:30 A. M.,	Christmas Recess.
Friday, January 31	First Term closes.
Monday, February 3	Examinations.
Tuesday, February 4	Second Term begins, 8:30 A. M.
	Registration, 9 A. M. Recitations begin at 1:30 P. M.
Sunday, February 9	Day of Prayer for Colleges.
Friday, March 25, 5 P. M., Tuesday, April 7, 8:30 A. M.,	Spring Recess.
Friday, May 8	Arbor Day.
Sunday, June 14	Baccalaureate Sermon.
Tuesday, June 16	Commencement Exercises.



AN APPROACH TO THE COLLEGE.

The College.

History.

In 1863 the state of Rhode Island accepted from the United States Government the land grant scrip, which gave to each state thirty thousand acres of the public lands for each senator and representative in Congress. The land was to be sold by the states or their agents, the proceeds arising from the sale invested, and the annual income derived therefrom was to be "inviolably appropriated by each state which may take and claim the benefit of this act, to the endowment, support, and maintenance of at least one college where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to Agriculture and Mechanic Arts, in such manner as the legislatures of the states may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life."

On March 2, 1887, the act known as the Hatch Act was passed, appropriating $15,000 annually to each state, for the purpose of establishing an Agricultural Experiment Station in connection with an Agricultural College or School. Such an Agricultural School was provided for by Chapter 706 of the Public Laws, passed May 23, 1888.

The United States Congress, on August 30, 1890, passed an act known as the New Morrill Bill. This appropriated for the further support of the agricultural and mechanical colleges a sum beginning with $15,000 and continuing, with a yearly increase of $1,000, until the annual appropriation should reach $25,000.

That the school already established might receive the benefit of the act of Congress, the General Assembly amended Chapter 706 of the Public Laws, incorporating the Rhode Island College of Agriculture and Mechanic Arts.

Since September, 1892, the institution has been conducted on a college basis, with an entirely new course of study.

Object and Organization.

The function of the Rhode Island College of Agriculture and Mechanic Arts is to foster the industrial life of the state, at least in so far as pertains to agriculture, manufactures, transportation, and home-making. This it does in three ways: 1. By the investigation and discovery of new truth, more or less directly applicable in the industries. 2. By the direct distribution of industrial information to the people. 3. By the organization and administration of definite courses of instruction designed to fit young men and young women for effective work in the industrial pursuits.

The first of these duties is performed by the

Experiment Station

for a description of the work of which, the reader is referred to the report of the director, constituting Part II of the Report of the Board of Managers for the current year. A statement of its staff organization may be found on page 11 of this catalogue.

The experiment station takes part, also, in the second phase of the college activities, by distributing its bulletins to all that desire and apply for them. In order, however, more fully and directly to bring the college and its work into touch with the people, a

College Extension Department

has been organized, and is in active operation.

The purpose of this department is to carry the instruction of the college to those who can not come to it for study. Whenever necessary and possible, visits will be made to any part of the state to examine farms, orchards, and gardens; to identify injurious insects or plant diseases, or give instruction in regard to methods of treatment; or to examine soils with a view to suggesting remedies for lack of fertility. General plans for laying out farms and for carrying out the details of any farm operations will be given the fullest consideration. The college is open for consultation at any time in regard to any problem of the farm, garden, or orchard. The fullest correspondence is invited, and conscientious consideration will be given to every letter received.

Whenever possible, arrangements will be made for lectures or demonstrations by members of the college faculty or experiment-station staff when called for at any agricultural meeting or neighborhood gathering. Coöperative experiments will be arranged to help the farmer solve the problems which are peculiar to his own farm or his portion of the state, and for the purpose of teaching some of the principles which have been worked out at the experiment stations of this and other states. As part of the work for the present season, such experiments will be outlined along the following lines: 1. Remedies for the San José scale and other injurious insects and plant diseases. 2. Treatment of greenhouse insects with hydrocyanic acid gas. 3. Liming and the use of fertilizers which the Rhode Island experiment station has discovered to be efficient.

From time to time, as funds will permit, special lecturers will be engaged to address granges, horticultural societies and other organizations interested in agriculture, on various timely topics. Such lectures will generally be given free of charge. Members of the faculty have prepared lectures on various subjects, which they are ready to deliver at any place in the state. These lectures are free, the only charge being the traveling expenses of the speaker.

An important part of this extension work is to be the encouragement of home study and the conducting of correspondence courses. For the present, time and funds will not permit the carrying out of this plan, but advice will be given to any person wishing to take up home study, regarding courses of reading, books and other literature which may be necessary in connection with such work.

Another important phase of nature study, which aims to interest the young people of the schools in things of nature and of the farm, is

The Nature Guard.

The Nature Guard is an organization of young people formed for the purpose of awakening in its members a livelier interest in the things of outdoor life. Its object is to stimulate the power of observation and to lay the foundation for a simple, rational education, which shall give the individual a love for nature and a sympathy with his environment, and furnish him with the means of making life more useful and more enjoyable, whether lived in the country or in the city.

The boys and girls in one school, or in one room, if the school is graded, form themselves into a band and elect officers, which are a spy and a guardian. This band fixes its own time for meeting and adopts its own methods of procedure. Enrollment cards to be signed and returned are furnished from the college. A printed leaflet is issued monthly during the school year, and a copy is sent to each member of the Nature Guard and also, on request, to individuals who are interested. The purpose of the leaflet is to furnish a stimulus to nature-study by making each month some suggestions bearing on the subject. Monthly reports, giving observations of their own, are asked from the members. Supplemental leaflets for teachers will be issued from time to time, the object of which will be to call attention to the latest views and methods in nature-study.

During the past year a new charter has been designed and all old bands, and bands which will be organized in the future, will receive a copy upon completing enrollment. Each member who sends in an enrollment card will receive an appropriate lapel button indicating that he belongs to the Nature Guard. At the end of the year, a neat certificate will be forwarded to all who have sent in reports during the year.

In connection with nature-study work, advice and assistance will be given to schools, to children's organizations, and to individual boys and girls who wish to carry on work with children's gardens. Where a number of gardens are placed together, as in schools or in boys' clubs, the college will send an instructor to teach methods of preparing the ground, planting, cultivating, and harvesting garden crops. Individuals will be given advice by circulars and by correspondence. Application has been made to the Washington County Agricultural Society to grant premiums to children for seed and plant collections and for exhibits of a few vegetables which can be easily grown, either in school or home gardens.

Further notes in regard to this work are given in leaflets and circulars issued by the Extension Department, and correspondence is solicited from any one who may be interested.

The College as an Educational Agency.

In its third form of activity, the purpose and work of the Rhode Island College of Agriculture and Mechanic Arts is to give college training and culture to young men and young women, not in spite of, but through and with vocational studies. Its courses are intended, first of all, to make the student a self-supporting unit in society, a positive force for social advancement, able and willing not only to maintain himself, but also to carry something of the common social burdens that always weigh upon the thoroughly efficient worker.

The college confers two degrees. The degree of Bachelor of Science is conferred upon a student who has completed one of the four-year courses described below. The degree of Master of Science is conferred upon those holding a Bachelor's degree from this institution, in regular order, or from other institutions having equal requirements, upon the completion of one year of resident study, the presentation of a satisfactory thesis in applied or economic science, and upon passing examinations in the subjects pursued. Persons wishing to apply for the Master's degree should write to the Committee on Graduate Study for further details.

I. The Four-Year Courses.

To this end certain college courses, intended to fit men and women for efficiency and leadership in well-defined life-activities, have been prepared. These courses are all founded upon training in mathematics, pure and applied; the English language as a means of intercommunication; and the sciences that deal with matter, force, and life as applied more directly to agriculture, the mechanic arts, and domestic economy. In the pursuit of these vocational studies, the effort is to accumulate an array of knowledge that, in the activities of industrial life, must be always practically serviceable, and, at the same time, to gain a disciplinary training both of brain and of muscle and nerve that makes for practical effectiveness. These courses, moreover, recognizing that a college course should include not only intellectual training and the knowledge and skill requisite for bread-winning, but also preparation for citizenship, for moral and social life, have intertwined with the vocational work and study previously mentioned, the subjects that most directly make for culture and morality—history, economics, literature, languages, ethics, psychology, and sociology. These are ranked as of equal importance with the bread-winning studies; and frequently these courses exercise their strongest impress, their most lasting influence, on the moral, emotional, cultural side of the student's nature.

The college courses just discussed are four years in length, and base themselves directly on the work of the four years of the high schools. They thus become an integral part of the school system of the state.

Young men and young women, citizens of the state and having full high-school training, are admitted to these courses without charge for tuition.

The four-year courses thus offered are the agricultural course, the engineering course, the teachers' course in applied science, and the course in home economics.

THE AGRICULTURAL COURSE.

The agricultural course is intended to give thorough preparation for taking charge of and operating a piece of landed property. Its work is centered around instruction and practice in horticulture, general farming, and animal husbandry (more especially as applied to dairying and the poultry industry). The course consists of practical work combined with thorough study of the sciences bearing directly on such work, viz.: botany, chemistry, geology, zoölogy, anatomy, physics, and entomology. In addition, it embraces the culture and mental discipline arising from the study of mathematics, English composition and rhetoric, history, drawing, modern languages, economics, and English literature. The course is planned to give the student a full and rounded development as worker, as citizen, and as man.

All agricultural students will follow the same work in the first two years; but, at the beginning of the Junior year, with the required work for all students in the course, four optional lines of work are offered, one of which must be selected by the student and followed until graduation. The four lines offered are general farming, horticulture, general animal husbandry, and poultry work. In addition, two science subjects must be elected. No option and no subject will be given for which a number of students sufficient to warrant giving it has not applied. For tabulated course, see pages 34–36.

THE ENGINEERING COURSE.

The engineering course has the same requirements for entrance, the same duration, and the same general plan as the agricultural course. Students will follow the course as laid down until the beginning of the Junior year, at which time, as with the agricultural course, students must elect one of the four optional lines offered, viz., mechanical, electrical, highway, and chemical engineering. Any line of work for which the number of applicants is insufficient to warrant giving it, the college reserves the right to withdraw.

The course is arranged to prepare young men for skilled and efficient work in the great manufacturing and commercial industries of the state; in the development of electricity as a motive force and in its thousand-fold other applications to the arts and to the life of society; in the activities of the new road-building era upon which we are entering; and in the applications of chemistry as now found in the great industrial establishments. At the same time, in this as in all other courses, it is not forgotten that the man is not a mere lever in his own machinery, and the effort after breadth and completeness of life is steadily maintained. We appeal to the industrial interests of the state to coöperate with us in making this course of great material benefit. For tabulated course, see pages 34–36.

TEACHERS' COURSE IN APPLIED SCIENCE.

This course is intended to prepare persons to teach in industrial schools those branches of applied science that pertain especially to agriculture and the mechanic arts. In such schools it has been found of especial importance that the teachers be trained in an environment of current thought sympathetic with the industrial applications of science and intelligently appreciative of the methods and problems of such work. In response, therefore, to the need, and in accordance with an expressed purpose of the new fund from the United States Government, we have constructed this course. The effort has been to make the course effective for its purpose, while at the same time retaining for it that breadth and that cultural influence that are necessary to fit the whole man for social life and are especially important in persons who, as teachers, will exercise large personal influence over immature youth.

The general plan of the course is the same as that of the other two courses just described. It opens to the student, at the beginning of the Junior year, three options, one of which he must select in conjunction with certain studies required of all. For tabulated course, see pages 34–36.

THE COURSE IN HOME ECONOMICS.

Of this course only the Freshman year is given in the synopsis of courses, page 34. The other years will be presented in a later pamphlet. The object of the course will be to give to the young woman such general and special training as will prepare her for the duties and work of the head of a home. It will include careful instruction in the planning, sanitation, and æsthetic surroundings of the home; the preparation of food with reference to palatableness, digestibility, and the maintenance of health; food for invalids, and other problems of dietetics; hygienic science and æsthetic principles as applied to clothing; the care of infants and young children; moral and educational problems in the bringing up of children; the shaping of the intellectual and moral atmosphere of the home. Attention will also be given to the financial management of the home, to accounts, to problems of marketing, of help, of caretaking, etc. Nowhere are science and wisdom more beneficially effective or more imperatively needed among us than in dealing with the affairs of the home in the complex social life of to-day. The success or failure of the young man, whatever his calling, is determined fully as much by the skill and good management exercised in his home as it is by his own energy, knowledge, and skill, and the results of the first ten years of combined effort in both spheres of work exert a controlling influence over the remainder of life. It costs too enormously to learn imperfectly, through years of failure and consequent bitterness, principles and methods of home administration of equal importance with those of provision for the home.

This course is designed, also, to fit young women to assume the domestic administration of large establishments, such as hospitals, boarding schools, and the like. For tabulated statement of Freshman year, see page 34.

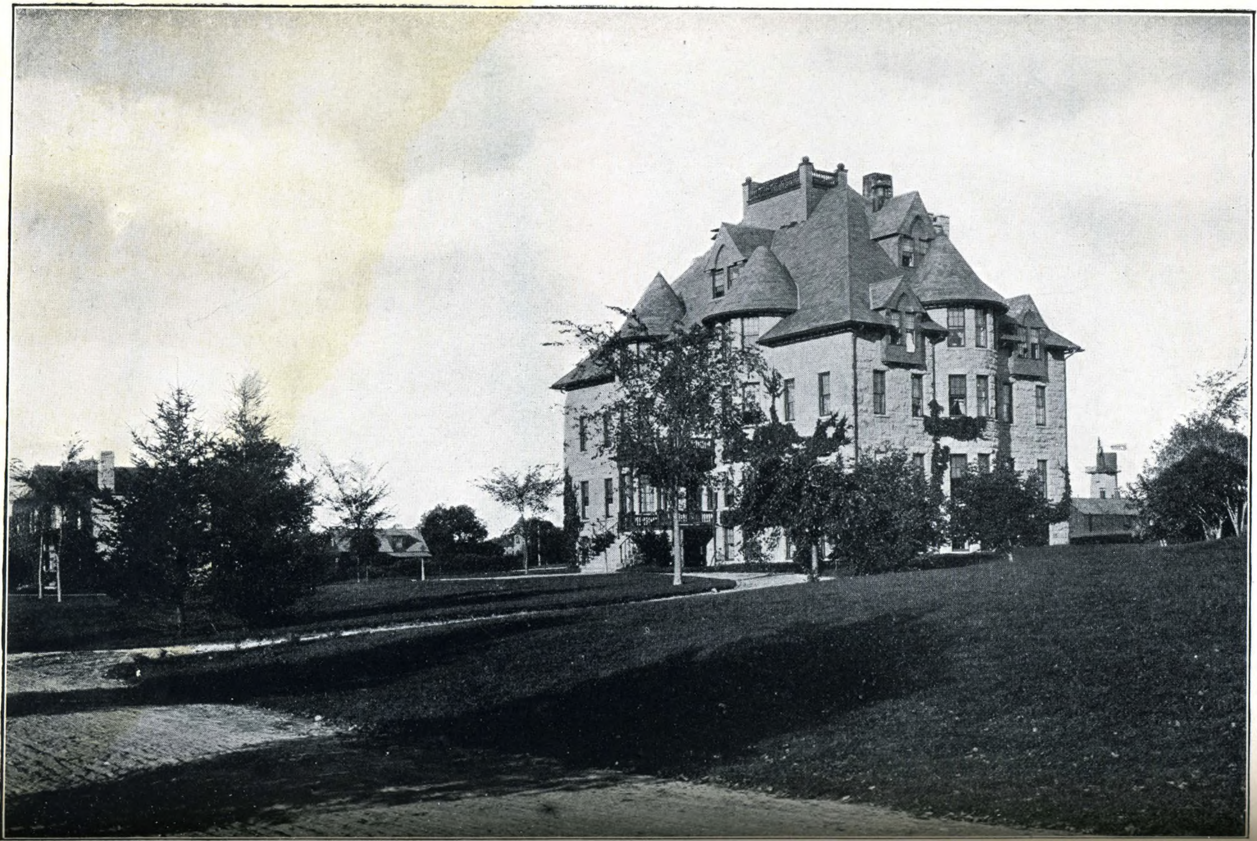
II. Sub-Freshman Classes.

For a number of years it has been found necessary to maintain at the college a preparatory school. Young people in whole or in part unprepared to enter our Freshman class, who do not have at their homes the advantages of high-school training, or who, without high-school advantages, have arrived at a certain maturity that renders it inadvisable for them to undertake the work at the home school, still continue to apply for admission. We are anxious to discontinue preparatory work, both in order that we may devote all our resources to our own legitimate field, and also that we may not seem to be in competition with the excellent high schools now scattered all over the state. Yet among these applicants, the exceptional cases just mentioned and others similar in nature seem to require that we still provide for them. We have, therefore, arranged the two Sub-Freshman years outlined on page 37. We wish it, however, clearly understood that we do not encourage students to come here for purely preparatory work; on the contrary, we strongly urge all young people to get their college preparation at a regular high school.

III. Short Courses in Agriculture and in Engineering.

There is a large class of young men and women who, unlike the more fortunate young people that are able, after completing the high school, to go through a full four years' college course, find themselves compelled, sometimes with a high-school course as preparation, much more frequently, however, without such training, to plan for entrance into industrial life by the shortest and quickest preparation that will give them the elementary knowledge and skill requisite. For such persons we have arranged a short course in agriculture and a short course in engineering. These courses are each two years in length; they require for entrance only that degree of training represented by a common-school education; they are in no sense preparatory to the corresponding college courses, and they do not, either directly or indirectly, lead to an academic degree. A certificate, however, will be awarded on completion of either course.

They are intended to be intensely and dogmatically practical, giving facts and processes without attempting to explain and correlate these by referring them to their basis in scientific theory or investigation. Moreover, each part of the course, and each subject, is in a way independent; so that the student who remains for any part of the course, say one year or even less, will be able to realize a definite acquisition, a certain distinct fitness, that he did not before possess. It is hoped that, after a little, the certificate may come to have, among farm owners and among the employers of labor in the factories and shops of the state, a certain well-defined value as com-



DAVIS HALL.

mendatory of the persons holding it. For tabulated statement of courses, see page 37.

IV. Special Poultry Course.

For many years this college has offered a winter course in the poultry industry. In fact, the first poultry course to be offered in the United States was offered here ten years ago. The college will continue to offer the twelve weeks' course during the winter term. It is also proposed to offer the same course during the fall term, provided there is sufficient demand for it. The object of these courses is to give the most direct and practical instruction to those who contemplate taking up the business, or to those already engaged in it, to enable them to proceed with greater certainty in their work and make the most of whatever they invest. All instruction bears immediately on the science and art of caring for fowls by the latest and best methods in practice. Practical poultrymen, prospective judges, and college graduates who desire to equip themselves as instructors and experimenters will find in these courses much that they need. Special circulars will be sent on request.

V. Selected Courses.

Whenever possible, students are urged to enter one of the courses leading to a degree. The arrangement of these courses is the result of careful thought and long experience as to the best combination of studies to fit one for the various occupations in which a technical education is required; and it is believed that no such thorough preparation can be obtained from special courses selected by the student.

However, any subjects described in this catalogue may be taken by special students of maturity, who can satisfy the professor in charge of the subject chosen that they are prepared to derive benefit from such work.

Requirements for Admission to the College, 1907.

Graduates from high schools, and other schools of similar grade, are admitted without examination, on certificates which are filled out by their principals. The candidate must apply to the college for the certificate, giving the address of his principal who is to certify him. The college will correspond with the principal, furnishing blanks for him to fill. Graduates from high schools are not admitted on diploma. Satisfactory evidence as to good moral character must be presented to the committee on entrance examinations.

Candidates for admission who are not graduates of high schools must in all cases supply a statement of such school records as they may have made, and also a certificate or testimonial of good moral character. The latter may be from some recent teacher, from a pastor, or from other responsible persons.

Candidates not entering the Freshman class on certificate will be examined in arithmetic; algebra; plane geometry; English grammar; advanced English; one year of German, French, or Latin; one year of science and one year of history or their equivalents.

In the arithmetic examination, especial attention will be paid to fractions, the metric system, simple and compound proportion, and square root; thorough drill in mental arithmetic will be necessary. The applicant should have mastered all of Wentworth's School Algebra as far as page 293, and Wells's Plane Geometry, or their equivalents.

The English requirements are those prescribed for entrance to the New England colleges. The student will be expected to show familiarity with the works named below. These are divided into two classes. Those marked (*a*) are to be read, and the candidate will be required to show a general knowledge of their subject-matter and of the lives of the authors. Those marked (*b*) are to be thoroughly studied, so that the candidate will be able to pass an examination upon their subject-matter and structure. To be acceptable, the candidate's paper must show a good knowledge of spelling, capitalization, punctuation, sentence and paragraph structure. The books prescribed for 1907–1908 are the following: (a) The Sir Roger de Coverley Papers; Coleridge's The Ancient Mariner; Eliot's Silas Marner; Irving's Life of Goldsmith; Lowell's The Vision of Sir Launfal; Scott's Ivanhoe and The Lady of the Lake; Shakespeare's Macbeth, and The Merchant of Venice; Tennyson's Idylls of the King. (*b*) Burke's Speech on Conciliation with America; Macaulay's Essay on Milton, and Life of Johnson; Milton's L'Allegro, Il Penseroso, Comus, and Lycidas; Shakespeare's Julius Cæsar.

The language requirements cover one year's work in either French, German, or Latin; and Latin is recommended. In French and German this requirement comprises the essentials of grammar, easy reading, and elementary composition. In Latin the candidate must be prepared to study Cæsar. The following text-books are recommended: Chardenal's Complete French Course or Longman's French Grammar (Complete Edition), Super's French Reader or Aldrich and Foster's; the Joynes-Meissner German Grammar, Part I, Collar's Shorter Eysenbach or Lange's German Method for Beginners, Guerber's Märchen und Erzählungen, Part I, or about one hundred and fifty pages of easy reading; Collar and Daniell's First Latin Book, or Lindsay and Rollins's Easy Latin Lessons.

Candidates may enter any of the higher classes for which they are prepared.

Teachers' Certificate.

The following resolution recently adopted by the Board of Education of this state is self-explanatory: "The certification of the president (of this college) that an applicant for a teacher's certificate has pursued a secondary school course of four years, subject to the approval of the committee on qualifications, and in addition thereto has pursued a four years' collegiate course in the Rhode Island College will be received as evidence of the required qualifications in scholastic subjects for a teacher's certificate of the first grade."

Opportunities Offered to Women.

The course in home economics is especially designed for women, although all other courses are open to them. The women's dormitory will accommodate a limited number of students, and the college will, on application, find boarding-places for others in private families in town. Special waiting and study rooms are provided for the women who are day students.

Expenses for Women.

Room-rent is $12.00 a term, and includes heating and lights. Rooms are provided with necessary furniture, including mattresses, but no other bedding material. Other expenses are as given below. The women have an opportunity to do their own washing and ironing. A Singer and a Household sewing-machine are at the disposal of all those living at the dormitory.

* Expenses.

Tuition is free to residents of Rhode Island. To non-residents, tuition is $15.00 a term, or $30.00 a year.

The regular college expenses are tabulated below: board, room-rent, and fees being payable in advance for each half-term, or on September 10 and November 12, 1907, and February 4 and April 8, 1908. Students should add a sum varying from $10.00 to $25.00 per year for miscellaneous expenses connected with college life.

	Minimum.	Maximum.
Board, $3.50 per week for 36 weeks	$126 00	$126 00
†Room-rent in men's dormitory, including heat and light, $15.00 per term	30 00	30 00
Incidental expenses for all students, $4.50 per term	9 00	9 00
Laboratory fees, $3.00 to $15.00 per term	6 00	30 00
Books	15 00	30 00
Laundry, 30 cts. to 60 cts. per week	10 80	21 60
Uniform for military drill, $15.50	7 50	30 00
	$204 30	$276 60

FEES.—All fees are payable in advance for each half-term. The amount of laboratory fees varies from 75 cents to $10.00 per term, depending upon the laboratory work taken. In botany the fee is 75 cents per term for non-collegiate students; $1.50, for college students. For each of the following, $1.50 per term is charged: zoölogical laboratory; carpenter shop; woodturning, forge shop, machine shop, and woodcarving. Fees for physics are as follows: for non-collegiate students, $1.50 per term; for Freshmen, $2.25; for Sophomores, $3.00. This pays for the material ordinarily used in class work and for the wear and care of tools and apparatus. Any person who breaks apparatus or tools, through carelessness or neglect of instructions, will be charged the cost of the same. The chemical laboratory fee is $4.00 per term for qualitative, quantitative, and organic laboratory work. This covers general chemicals and use of apparatus. Students are required to pay for breakage and for any chemicals they may use in making special preparations for themselves. A fee of $4.50 is also required in the electrical laboratory. A fee of 50 cents will be charged for each examination to make up a condition. Graduates pay the cost of diplomas, $5.00. *No diploma will be issued until the candidate has paid all term bills.*

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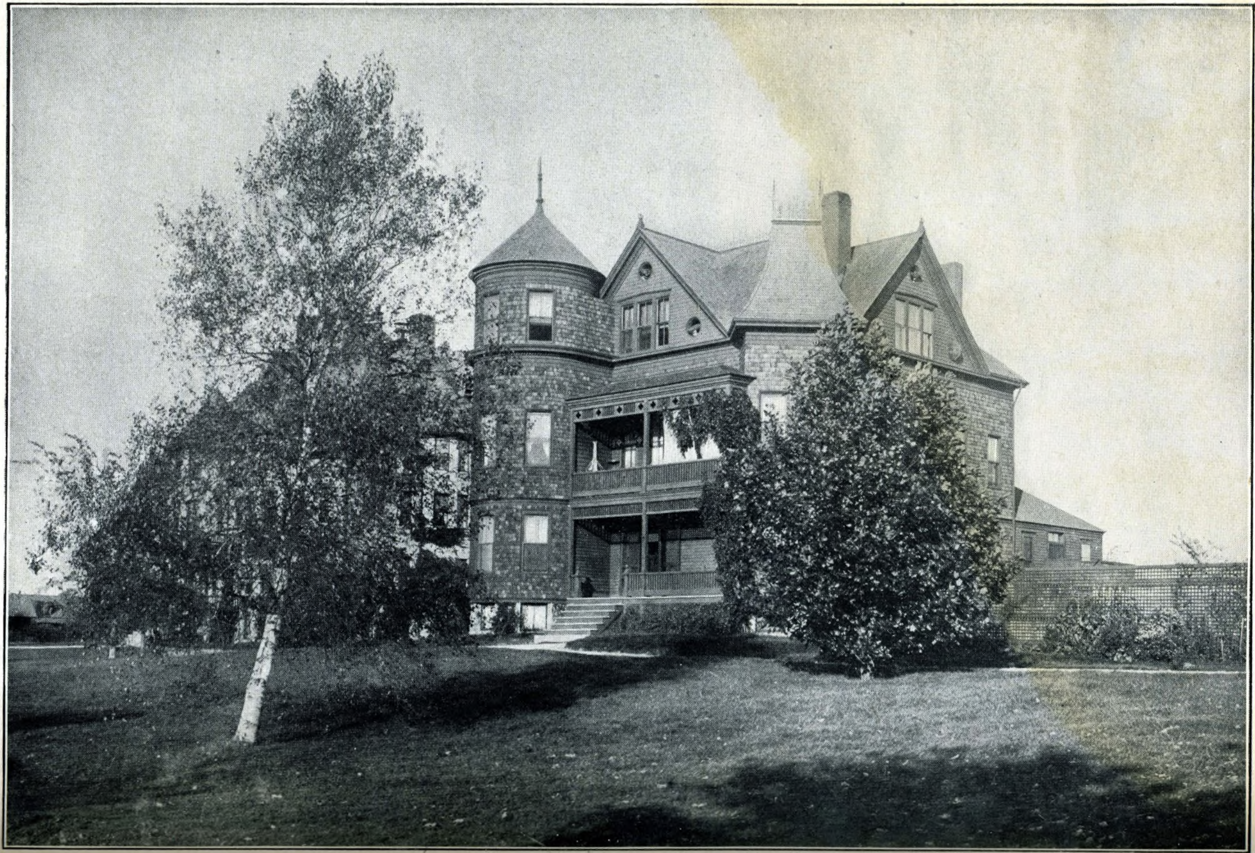
*For exceptions in expenses for women, see above.

†There will be no refund for room-rent except by special arrangement with the president of the college.



BOARDING HALL.

Uniform.—Every able-bodied male student is required to drill and to wear a uniform. The uniform must be paid for immediately on entering the college, when the students are measured for the suits. When worn only on drill and properly cared for, one uniform may last two or more years. The student may, however, wear his uniform all the time.

Transportation.—The college conveys students daily to and from the railroad station free of charge. Once at the beginning and end of each term, a team conveys trunks to and from the station.

Boarding Students.—Boarding students shall deposit $30.00 each half-term. The price of board for 1907–8 will be $3.50 per week. Students who *leave regularly every week* on Friday afternoon and return Monday morning will pay $2.50 per week. No other reduction on board is made for less than five whole days' absence at one time. No person will be admitted to the dining-room until he has secured from the bursar a meal ticket, on the back of which will be found the rules governing the holder of such ticket. After this ticket is issued, all charges for board will be made in accordance therewith unless the student has the ticket changed by the bursar. Arrangement of charges for meals sent to students' rooms for any cause must be made in advance with the matron of the boarding hall.

Furniture.—*All students in the men's dormitory are required to supply their own furniture and bedding.* The necessary furniture may be obtained at the college when desired. A room may be furnished for from $8.00 to $10.00. Iron bedsteads three feet wide are included under room-rent. The furniture, if properly kept, may be sold, when the student leaves, for one-half to three-fourths the original price.

Rooms in the Village.—At present the dormitory facilities for young men are taxed beyond their capacity. Students especially desirous of rooming in the dormitory are advised to make their applications at once. It is probable that most of the dormitory rooms will be occupied by the older students. Arrangements have been made for rooms, however, in the village of Kingston, some of these being under college management and others in private houses. In the case of the former, room-rent will vary from 60 cents to $1.00 per week, with stoves and bedsteads furnished, the student to provide other furnishings and fuel himself. Furnished rooms in private houses for students who occupy them throughout the college year range from $1.25 to $2.00 per week.

College Store.—Students will be required to pay cash at the store for all books and other supplies.

Damage Fund.—All damage not due to ordinary wear shall be assessed to students as follows:

1. Students at once acknowledging damage and agreeing to pay for same will be assessed actual cost of repair, including labor.

2. Students found guilty of such damage but not acknowledging and settling for the damage will be charged double the cost of repair.

3. Students will be responsible for damage in their own rooms.

4. Damage that is not settled as above may be assessed to all the students or to a group of students, pro rata. Each case and the amount of assessment will be considered on its merits.

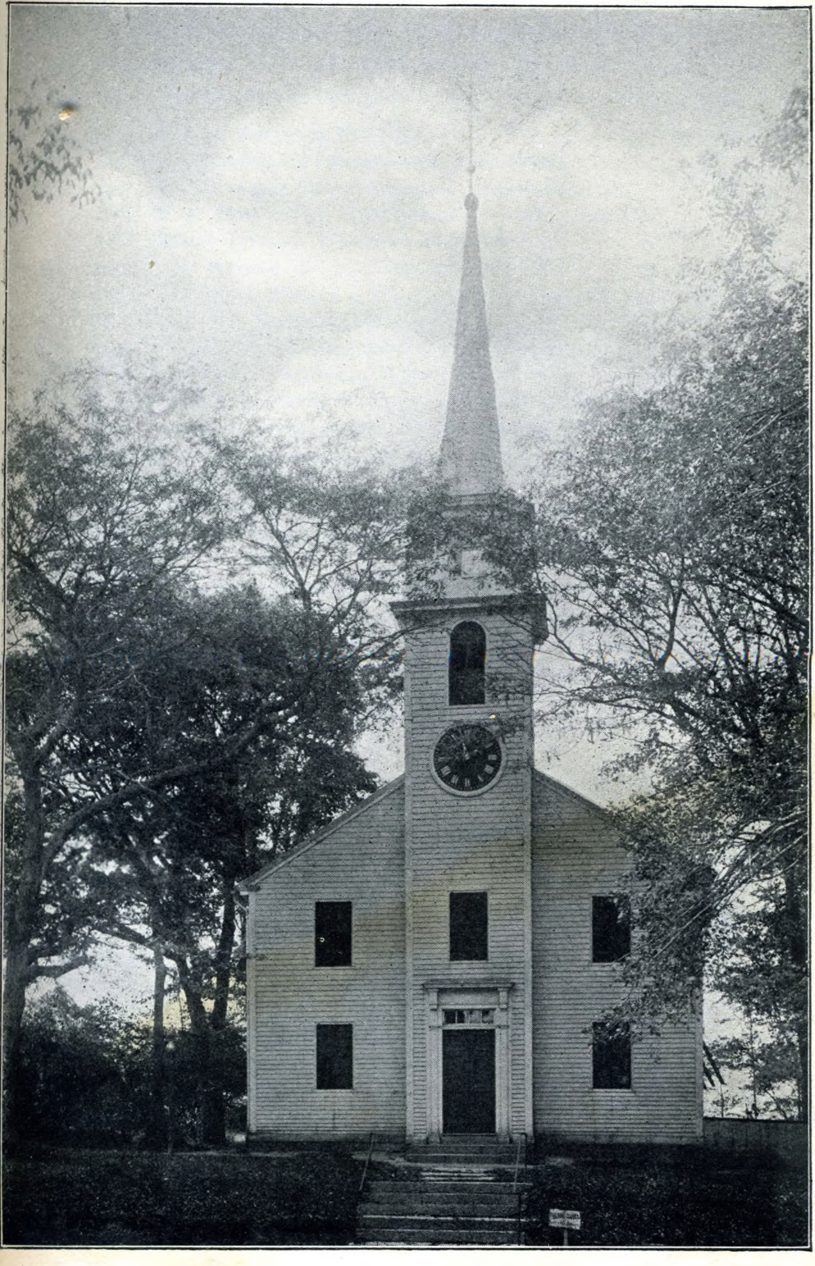
Self-Help.

There is a certain amount of labor about the college buildings, on the farm, at the experiment station, and in the offices and laboratories, for which students will be employed whenever it is feasible to do so. Industrious students frequently earn an amount which aids considerably in paying their expenses, a sum varying from $25.00 to $125.00 per year.

In view of the fact, however, that the amount of this work is strictly limited and that it is not the policy of the college to create such work, and, furthermore, because of the increasing number of students and the more frequent applications for student labor, it seems desirable to state the conditions under which this work will hereafter be assigned.

Preference will be given to such students as are in most need of this labor for support while in college. New students desiring labor should bring a statement from parent or guardian, form for which will be furnished, showing to what extent the student must depend upon himself for support. Preference will generally be given to students who have been in attendance for at least a year, and to students who room and board at the college.

Any student accepting labor must maintain a fair record both in deportment and in the classroom. No student will be kept at work who does not give reasonable satisfaction. Any student abusing privileges incidental to his duties as student laborer will be considered inefficient and his work withdrawn. Payment for this service will



THE VILLAGE CHURCH.

vary from ten to fifteen cents per hour, according to the grade and difficulty of the work and the experience of the student. In general, students should not expect more than ten cents an hour for the first year. It is a rule of the college that any student desiring to perform more than twenty hours of student labor per week must secure permission from the faculty council. In the future, it may be necessary to limit the amount which any one student may receive for student labor.

Some young people have the impression that the college offers such opportunities for self-help that it is safe to enter with practically no funds, relying solely on money earned while here. In exceptional cases this may be done, but prospective students are strongly advised not to enter until they have at least $100.00 at their disposal. A student who has to make his own way must also plan to work steadily during both the short and long vacations. Occasional vacation work at the college can be furnished to students, but as a rule they should look elsewhere for this class of work.

Religious Influences.

This college is a state institution, and, consequently, the widest latitude is given to all creeds and forms of religious belief. Simple chapel exercises are held every school-day morning, and are conducted by the president or some other member of the faculty. All students are expected to attend chapel.

A branch of the Intercollegiate Young Men's Christian Association is doing active work among the men students, holding a meeting every Sunday afternoon throughout the year. This association conducts courses in bible study and is taking the lead in endeavoring to establish sound and high ideas of college life.

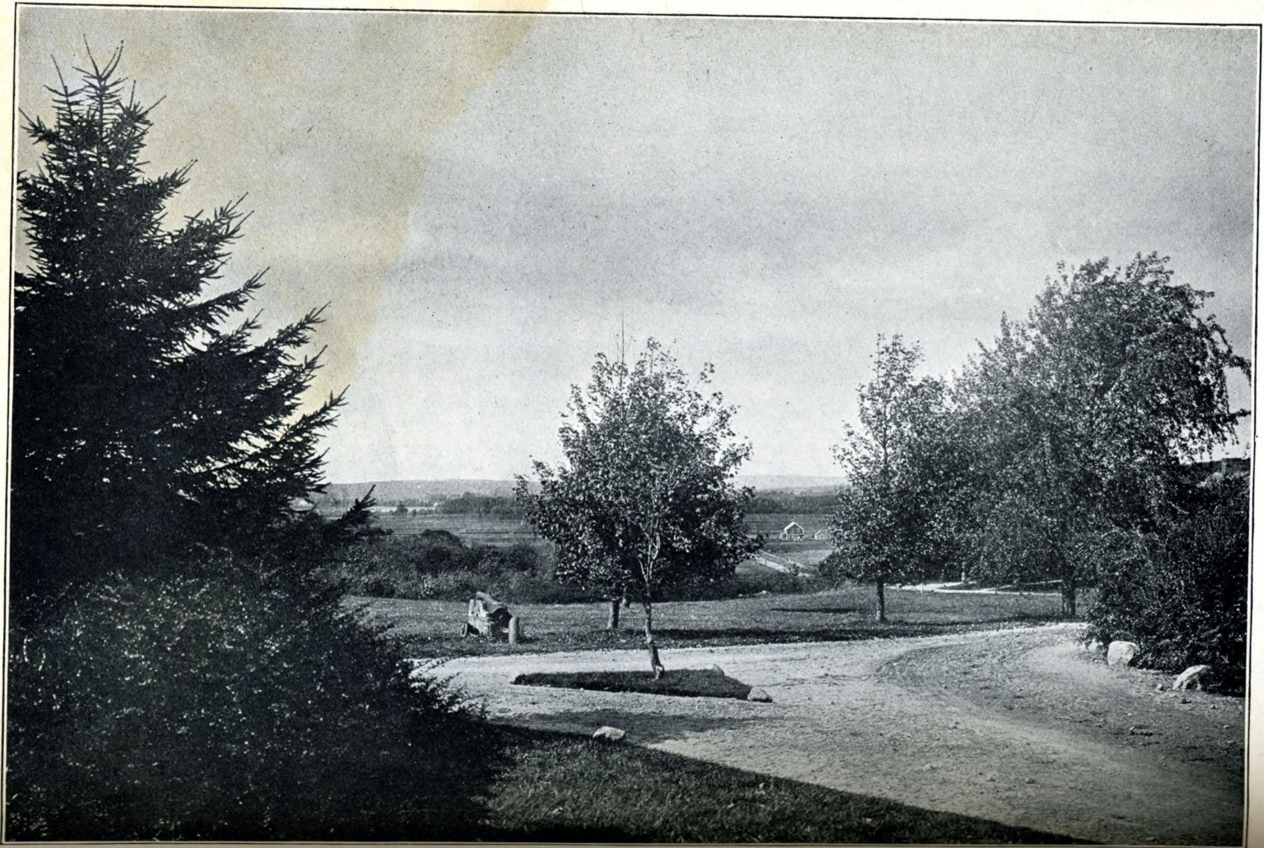
The Young Women's Christian Union is doing a similar work for the young women.

The village church cordially invites all students to attend its services and, if possible, to join its membership. Every effort is made by the college to minister to the higher life of the students and to bring before them the noblest ideals, without in any way attempting to coerce them to particular beliefs.

Thursday Lectures.

From time to time speakers from abroad, both clergymen and laymen, are invited to address the students upon various subjects. Members of the faculty have also been among the lecturers. Following is the list of speakers for the year:

Sept. 13. Pres. Howard Edwards, PURPOSE.
20. Dr. H. J. Wheeler, EXPERIMENT-STATION WORK.
27. Prof. Fred W. Card, OPPORTUNITIES IN AGRICULTURE.
Oct. 4. Prof. W. E. Drake, THE BEGINNINGS OF ARCHITECTURE.
11. Prof. Gilbert Tolman, WEATHER FORECASTING.
18. Rev. C. H. Wheeler, SALEM WITCHCRAFT.
25. Prof. C. D. Smith, Michigan, PURPOSE OF AN AGRICULTURAL COLLEGE.
Nov. 1. Rev. Charles P. Redfield, IDEALS.
8. Miss E. J. Watson, SOME SUMMER GLIMPSES OF ITALY.
15. Rev. Frederick E. Seymour, Wakefield, DUTY.
22. Rev. Frank J. Goodwin, Pawtucket, ABRAHAM LINCOLN.
Dec. 6. Rev. George W. Kent, Providence, DUTIES OF CITIZENSHIP.
15. Rev. A. B. Cristy, Providence, WHAT CAN THE STATE DO TO CHRISTIANIZE SOCIETY?
Jan. 10. Miss H. L. Merrow, ON CAPE COD, IN THE FOOTSTEPS OF THOREAU.
17. Pres. W. H. P. Faunce, Brown University, ROBERT LOUIS STEVENSON.
24. Rev. Harry W. Lambert, East Providence, HINTS FROM HAMLET.
31. Hon. W. E. Ranger, Providence, SOCIAL IDEALS.
Feb. 7.
14. Gen. E. H. Rhodes, Providence, THE SIEGE OF PETERSBURG AND THE SURRENDER AT APPOMATTOX.
21. Prof. J. Irving Manatt, Brown University, GLIMPSES OF GREEK HUSBANDRY.
28. Hon. W. B. Weeden, Providence, FORMATION AND DEVELOPMENT OF THE UNITED STATES CONSTITUTION.
March 7. Hon. George H. Utter, Westerly, PUBLIC OPINION.
14. Rev. A. E. Krom, Providence, MASTER OF THE SITUATION.
21. Supt. W. H. Small, Providence, THE ANCIENT SCHOOLMASTER.
April 11. Rev. A. M. Lord, Providence, THE ENGLISH HOMES OF THE AMERICAN COLONISTS.
18. Prof. H. B. Knox, State Normal School, RHODE ISLAND, SOCIAL AND POLITICAL, IN THE LIGHT OF ITS HISTORY.
25. Rev. Frank Rector, Pawtucket, LESSONS FROM DUST AND DIRT.
May 2. Col. D. R. Ballou, Providence, COUNTRY LIFE THE CONSERVING FORCE OF THE AMERICAN HOME AND OF REPUBLICAN INSTITUTIONS.
9. A Forestry Program.
16. Hon. A. M. Eaton, Providence, ROGER WILLIAMS, THE MAN.
23. Hon. Sumner Mowry, Peace Dale, POPULAR ELECTION OF SENATORS TO CONGRESS.



VISTAS.

The Rhode Island College Lecture Association.

Faculty and students, uniting with residents of the vicinity, conduct a winter lecture course, the aim of which is to introduce talented speakers upon subjects both entertaining and instructive. The association may be looked upon as a permanent and important factor in college activities. For the season of 1906–1907 the following lecturers were secured:

Jan. 16. Henry Oldys, U. S. Dept. of Agr., Birds and Their Songs.
Feb. 8. Dr. Charles A. Eastman, The Real Indian.
March 1. Frederick W. Bancroft, English Songs and Song Writers.
22. Dr. William L. Felter, The Courtship of Miles Standish.
April 5. The Colonial Orchestral Club. Maude Fowler, Reader.

The Library.

The library occupies a large room in Lippitt Hall, and numbers over fourteen thousand volumes. The books are arranged in stacks, to which the students have free access. The Dewey system of classification is used; and a dictionary catalogue gives author, subject, and title. As the library has been from the first intended for reference work, the various departments of instruction have made their selections with the greatest care. Combined with the library is the reading-room, where one hundred of the leading periodicals—of literary, scientific, and general interest—are on file. From time to time these are bound, and prove of great value in research work.

The library is open every week day from 7:30 A. M. to 6:00 P.M., with the exception of a half-hour at noon. The librarian or her representative is in constant attendance to aid any one in search of information. As the college is an institution designed to further the educational interests of Rhode Island, all residents of the state are at liberty to use its library.

Location.

The college campus is one and a half miles from Kingston station, which is at the junction of the main line of the N. Y., N. H., & H. R. R. with the Narragansett Pier branch, thus insuring excellent railroad accommodations. The buildings are on a hill which commands an extended view of the surrounding country—a location both healthful and beautiful.

The Courses of Study Leading to a Degree.

EXPLANATORY.—The Roman numeral following a subject refers to the subject number; the Arabic figures next following indicate the page of the catalogue on which the subject is described. The last Arabic figure indicates the number of hours credit for the subject. A credit is given for one recitation; or for one exercise of two hours in laboratory, field, or shop. Consulting with the committee on courses of study, the student chooses his electives from the subjects described on pages 38–66. For requirements for admission to these courses, see pages 24–26.

Freshman Year.

Agriculture.

First Term. Subjects.	Credits.	Second Term. Credits.
English I (58)	2	2
Modern Language I (59) or VI (60)	4	4
Mathematics I (60)	3	......
Mathematics II (61)		3
Chemistry I (46)	3½	3½
Botany I (45)	3	3
Agronomy I (39)	2	......
Horticulture I (43)	2	......
Animal Husbandry I (41)		2
Animal Husbandry III (41)		1
Freehand Drawing II (48)	1	......
Mechanics I (53)		1½
Military Drill and Tactics(62)	2	2

Engineering.

First Term. Subjects.	Credits.	Second Term. Credits.
English I (58)	2	2
Modern Language I (59) or VI (60)	4	4
Mathematics III (61)	5	......
Mathematics IV (61)		5
Chemistry I (46)	3½	3½
Mechanics VIII (54)	3	......
Mechanics IX and XI (54)		3
Freehand Drawing I (48)	2	......
Mechanics I (53)		3
Military Drill and Tactics(62)	2	2

Teachers' Course in Applied Science.

First Term. Subjects.	Credits.	Second Term. Credits.
English I (58)	2	2
Modern Language I (59) or VI (60)	4	4
Mathematics III (61)	5	......
Mathematics IV (61)		5
Chemistry I (46)	3½	3½
Botany I (45)	3	3
Mechanics VIII (54)	1	1
Freehand Drawing II (48)	1	......
Freehand Drawing III (48)		1
Military Drill and Tactics(62)	2	2
NOTE.—Women students in this course take the Freshman year of the course in Home Economics.		

Home Economics.

First Term. Subjects.	Credits.	Second Term. Credits.
English I (58)	2	2
Modern Language I (59) or VI (60)	4	4
Mathematics III (61)	5	......
Mathematics IV (61)		5
Chemistry I (46)	3½	3½
Botany I (45)	3	3
Mechanics V (54)	2	......
Freehand Drawing II (48)	1	......
Freehand Drawing III (48)		2
Physical Exercise	1	1

Sophomore Year.

Agriculture.

First Term. Subjects.	Credits.	Second Term. Credits.
English II (58)	2	2
Modern Language II (59) or VII (60)	3	3
Chemistry II (46)	3	......
Physics I (63)		5
Botany II (45)	3	......
Zoölogy I (65)	3	......
Zoölogy III (65)		4
Animal Husbandry XII(42)	1	......
Agronomy VII(39) and II(39)	2	2
Horticulture II (43)		2
Highway Engineering I (51)	2½	......
Mechanics VIII (54)		2½
Military Drill (62)	1	1

Engineering.

First Term. Subjects.	Credits.	Second Term. Credits.
English II (58)	2	2
Modern Language II (59) or VII (60)	3	3
Chemistry II (46)	3	......
Physics II (63)	4	4
Physics III (63)	1½	1½
Mathematics V (61)	5	......
Mathematics IV (61)		5
Mechanics III (53)		3
Highway Engineering I (51)	3	......
Mechanics II (53)		2½
Mechanics XIII (54)		3
Military Drill (62)	1	1

Teachers' Course in Applied Science.

First Term. Subjects.	Credits.	Second Term. Credits.
English II (58)	2	2
Modern Language II (59) or VII (60)	3	3
Chemistry II (46)	3	......
Physics II (63)	4	4
Physics III (63)	1½	1½
Botany II (45)	3	......
Zoölogy II (65)	3	3
Zoölogy IX (66)		3
Chemistry III (46)		4
Military Drill (62)	1	1

Home Economics.

The Sophomore, Junior, and Senior years of this course will be published later.

Junior Year.

Agriculture.

First Term. Subjects.	First Term. Credits.	Second Term. Credits.
English III (58)	3	
English IV (59)		2
History I or II (57)	2	3
Military Drill (62)	1	1
Chemistry XIV (47)	4	
Zoölogy IV (65)		4
Botany IV (45)		2
Agronomy III (39)	4	
Animal Husbandry VII (41)	1½	
Animal Husbandry VI (41)	2	
Horticulture III (43)		1
Horticulture IV (43)		1
Mechanics XII (54)		1
Mechanics XIIIa (54)	1½	

Options: A, B, C.
One of these must be chosen.
Each group receives 5 credits for each term.

A. Agronomy:
    Subjects IV, V, VI (39).
B. Horticulture:
    Subjects V (43), VI, VII (44).
C. Animal Husbandry:
    Subjects IV, VI, IX (41).
    or
    Subjects XIV, XIII (42).

Engineering.

First Term. Subjects.	First Term. Credits.	Second Term. Credits.
English III (58)	3	
English IV (59)		2
History I or II (57)	2	3
Mechanics XV (54), XVI, XVII (55)	3	3
Mechanics XIX, XXI (55)		5
Chemistry VIII (47)	2	
Military Drill (62)	1	1
Options: A, B, C, D. One of these must be chosen.		
A. Mechanical Engineering:		
Mechanics IV (54)	2½	2½
Mechanics X and XIII (54)	4½	3
Mechanics XVIIa, XX, XXII (55)	5	
Electrical Engineering VII (50)		3
B. Electrical Engineering:		
Electrical Engineering I, III (49)	3	3
Electrical Engineering IV (49)	1	
Electrical Engineering II (49), Physics V (64)	3	3
Electrical Engineering VI (50)		3
Electrical Engineering V (49)	2	
Physics IV (64)	2	
Mathematics VII (61)	2	
C. Highway Engineering:		
Highway Engineering II (51)	5	
Highway Engineering III (51), V (52)		5
Highway Engineering IV (52)	2	
Geology I (57)		2
Chemistry V (46)	1½	
Mechanics XVIIa, XX, XXII (55)	5	
Electrical Engineering VII (50)		3
D. Chemical Engineering:		
Chemistry III (46)		4
Chemistry IV (46)	6	3
Chemistry VI, VII (46)	3	
Chemistry V (46)	1½	
Electrical Engineering VII (50)		3

Teachers' Course in Applied Science.

First Term. Subjects.	First Term. Credits.	Second Term. Credits.
English III (58)	3	
English IV (59)		2
History I or II (57)	2	3
Military Drill (62)	1	1
Option	10	10
To be chosen from the following departments of instruction: A. Chemistry (46) (47). B. Biology [Botany (44) and Zoölogy (65)] C. Agriculture (38).		
Elective	5	5
Subjects not selected for the option to be chosen.		

Senior Year.

Agriculture.

First Term. Subjects.	Credits.	Second Term. Credits.
English V (59)	3	2
History III (58)	3	2
Economics I (48)	2	3
Military Drill (62)	1	1
Thesis	3	3
Options A, B, C. One of these must be chosen. Each option receives 10 credits for each term.		
A. Agronomy:		
Subjects VIII (39), IX, X, XI (40). Mechanics VII (54).		
B. Horticulture:		
1. Subjects VIII, IX (44).		
2. Subjects X, XI, XII (44); or Subject XIII (44). Botany III (45).		
C. Animal Husbandry:		
Subjects II, V, VIII, X (41), XI (42); or Subjects V, VIII (41), XV, XVI, XVII (42).		

Engineering.

First Term. Subjects.	Credits.	Second Term. Credits.
English V (59)	3	2
History III (58)	3	2
Economics I (48)	2	3
Military Drill (62)	1	1
Thesis	3	3
Options A, B, C, D. One of these must be chosen.		
A. Mechanical Engineering:		
Mechanics XIII (54)	1½	3
Mechanics XVIII (55)	4	......
Mechanics XXIII, XXIIIa, XXIV (55) XXV (56)		5
Mechanics XXVI (56)	3	......
B. Electrical Engineering:		
Electrical Engineering VIII (50)	3	3
Electrical Engineering IX (50), Physics VI (64)	3	3
Electrical Engineering X (50)		3
Electrical Engineering XI, XII (50)	6	......
Electrical Engineering XIII, XIV (50)		5
C. Highway Engineering:		
Highway Engineering VI (52)	2	......
Highway Engineering VII (52)		4
Highway Engineering VIII, IX (52)	9	......
Highway Engineering X, XI (52)		5
Highway Engineering XII, XIII (53)		5
Mechanics XVIII (55)	4	......
D. Chemical Engineering:		
Chemistry IX (47)	4	......
Chemistry X (47)	4	......
Chemistry XI (47)		3
Chemistry XII (47), XIII (47)		7
Mechanics XVIII (55)	4	......

Teachers' Course in Applied Science.

First Term. Subjects.	Credits.	Second Term. Credits.
English V (59)	3	2
History III (58)	3	2
Economics I (48)	2	3
Military Drill (62)	1	1
Thesis	3	3
Option	10	10
To be chosen from the following departments of instruction:		
A. Chemistry (45).		
B. Biology [Botany (44) and Zoölogy (65)].		
C. Agriculture (38).		

The Courses of Study Leading to a Certificate.

The requirements for admission to the Sub-Freshman course are arithmetic, English grammar, geography, and United States history. The only scholarship requirement for admission to the Short Courses in Agriculture and Engineering is a common-school education. The age for admission to all three courses must be at least sixteen years. The courses lead to a certificate.

Sub-Freshman.

FIRST YEAR.

First Term. Subjects.	Credits.	Second Term. Credits.
English C (59)	5	5
History A (58)	4	2
Mathematics A (61)	5½	5
Physics A (64)		3
Botany A (45)	3	3
Freehand Drawing II, III (48)	1	1
or		
Mechanics A (56)	1	1
Military Drill (62)	1	1

SECOND YEAR.

English D (59)	3	3
Latin A (60)	5	5
Mathematics B (61)	3	3
Mathematics E (61)	4	4
Physics B (64)	2½	2½
Mechanics G (56)	1	1
or		
Mechanics F (56)	1	1
Military Drill (62)	1	1

Short Course in Agriculture.

FIRST YEAR.

First Term. Subjects.	Credits.	Second Term. Credits.
English A (59)	4	4
Mathematics C, D (61)	4	4
Botany A (45)	3	3
Zoölogy A (66)	4½	......
Agronomy C (40)	3	......
Horticulture A (44)		3
Animal Husbandry A, B (42)		4
Mechanics H (56)	1	1½
Mechanics I (56)	1½	1½
Military Drill (62)	1	1

SECOND YEAR.

English B (59)	3	3
Mathematics F (61)	4	4
Chemistry A (47)	4	4
Agronomy A (40)	4	......
Agronomy B (40)	3	......
Animal Husbandry C, D (42)	3	......
Animal Husbandry E, F (42)		3
Horticulture B (44)		4
Mechanics J (57), Agronomy D (40)	2	2
Military Drill (62)	1	1

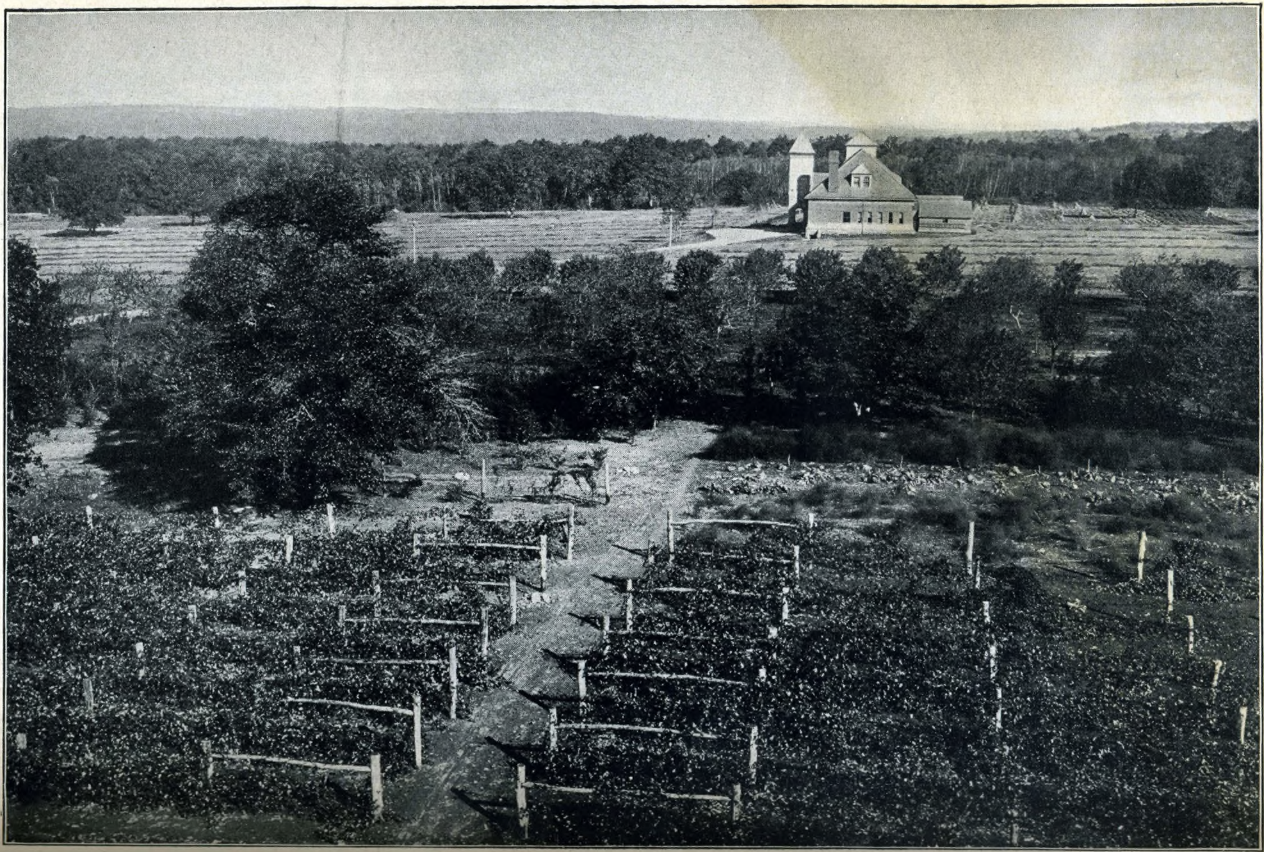
Short Course in Engineering.

FIRST YEAR.

First Term. Subjects.	Credits.	Second Term. Credits.
English A (59)	4	4
Mathematics C, D (61)	4	4
Mechanics A (56)	3	3
Mechanics B (56)	4½	3
Mechanics D (56)	3	3
Freehand Drawing I (48)	2	......
Physics A (64)		3
Military Drill (62)	1	1

SECOND YEAR.

English B (59)	3	3
Mathematics F (61)	4	4
Mechanics C (56)	4½	4½
Mechanics E (56)	5	5
Physics B (64)	2½	2½
Military Drill (62)	1	1



HORTICULTURAL DEPARTMENT.

Departments of Instruction.

The following subjects are offered in the different departments. All subjects in the department of instruction preceded by a Roman numeral count towards the degree of B. S. All subjects preceded by a capital letter lead to a certificate.

Agriculture.

PROFESSOR ADAMS, ASSISTANT–PROFESSOR BOLTÉ, MR. BURDICK, MR. SCHAEFER.

The instruction given in this subject is grouped under the three heads, agronomy, animal husbandry, and horticulture. The aim of these departments is to give such theoretical and practical training in the fundamentals of agriculture as will enable those who take these courses to fill positions of trust and responsibility, either as owners of their own farms, managers of estates, or along other lines of agricultural activity. Students are expected to use the library, which contains, among other valuable works, a complete set of experiment-station publications, also many of the publications of the United States Department of Agriculture, together with numerous state reports upon agricultural subjects.

AGRONOMY.

The instruction in agronomy begins in the first term of the Freshman year, when the fundamental operations which are conducted upon every farm are considered. Following this work, are subjects dealing with the various field crops and their uses as food for man and beast. The business side of farm life is given attention in the subjects treating of farm equipment and management. Work with farm machinery is a laboratory course, in which the students are taught how to care for, repair and operate modern farm machinery. In the Senior year there is instruction in plant breeding, a subject which is of the utmost importance to one who would make the most of the opportunities in crop production. Instruction in agricultural experimentation deals largely with the application of the results which have been obtained by the experiment stations, to the practical problems of the farm.

The equipment of the department includes the college farm and barns; also the farm machinery, consisting of a good line of tillage implements, fertilizer distributors, grain drill, and harvesting machinery. A well equipped blacksmith shop is also provided.

Students have the advantage of the field experiments which are being conducted by the experiment station upon fertilizer problems and with various rotations.

Subjects.

I. Principles of Agriculture.—History of agriculture. Discussion of the general underlying principles which govern farm operations. *Two recitation credits per week, first term. Required of Freshmen in Agriculture.*

II. Forage Crops.—History and development of the plants used for forage; silage, methods of construction of silos. *Two recitation credits per week, second term. Required of Sophomores in Agriculture.*

III. Soils and Fertilizers.—Origin and constituents of soils; texture, moisture, drainage, methods of tillage. Farm manures, artificial manures, composition and use; formulas for various crops. *Three recitation and one laboratory credits per week, first term. Required of Juniors in Agriculture.*

IV. Farm Crops.—Origin and history; production and place in the rotation of clovers, grasses, and root crops. *Agronomy option for Juniors in Agriculture.*

V. Farm Equipment.—Selection and equipment of farms, buildings, fences, roads, water supply, farm power, machinery. *Agronomy option for Juniors in Agriculture.*

VI. Farm Machinery.—Development of farm machinery, methods of construction, function, and operation. *Agronomy option for Juniors in Agriculture.*

VII. Farm Management.—Discussion of agricultural methods, choice of a farm, capital, marketing, types of farming, accounts. *Two recitation credits per week, first term. Required of Sophomores in Agriculture.*

VIII. Farm Management (advanced).—Individual problems of farm management are assigned. Abandoned farms will be visited and a critical study made of the existing conditions. *Agronomy option for Seniors in Agriculture.*

IX. Literature.—History of agricultural and horticultural literature; a study of the different types of agricultural literature as illustrated by ancient and modern authors. Reports upon special topics. *Agronomy option for Seniors in Agriculture.*

X. Agricultural Experimentation.—Objects, methods, and results of agricultural experimentation. A study of federal and state aid to agriculture as shown in the work of the United States Department of Agriculture and the Experiment Stations. *Agronomy option for Seniors in Agriculture.*

XI. Plant Breeding.—A discussion of the development of plants under cultivation; with reference to heredity, environment,variation, and selection. *Agronomy and Horticultural option for Seniors in Agriculture.*

XII. Thesis. *Three credits per week throughout the year. Required of Seniors in Agriculture.*

A. Soils and Fertilizers.—An elementary course upon the origin and nature of soils. Fertilizers; natural and artificial manures; preparation and use; fertilizer arithmetic. *Three recitation and one laboratory credits per week, first term. Required of Short-Course students in Agriculture, second year.*

B. Crops and Rotations.—Methods of culture and uses of the grasses, clovers, cereals, and root crops. Rotation for the various types of farms. *Three recitation credits per week, first term. Required of Short-Course students in Agriculture, second year.*

C. Farm Management and Accounts.—An elementary course upon the principles of farm management, equipment, and farm bookkeeping. *Three recitation credits per week, first term. Required of Short-Course students in Agriculture, first year.*

D. Farm Machinery.—Care and repair of farm implements. *Two laboratory credits for twelve weeks. Required of Short-Course students in Agriculture, second year.*

ANIMAL HUSBANDRY.

Instruction in animal husbandry is so arranged as to furnish practical as well as theoretical training in the selection, care, and management of the live stock on the farm. Instruction commences with elementary stock judging, breeds, and care in the second term of the Freshman year. During the Sophomore year, instruction is given in poultry craft and dairy practice. These two subjects aim to provide a large amount of practical work in combination with the theoretical. In the Junior year, attention is directed to the breeding and feeding of animals; and in the Senior year the work includes judging, care of animals, and veterinary practice. In veterinary practice, the student is taught to diagnose and prescribe for the common ailments of farm animals.

The equipment is particularly strong on the poultry side. The college poultry plant enables one to obtain a large amount of practical experience in incubation, brooding, and management. In addition to the poultry in the college yards, the students have opportunity to follow the investigations with turkeys which are now being conducted by the experiment station.

In addition to the subjects mentioned below, there is a twelve weeks' course in poultry keeping during the winter months, full information concerning which may be obtained by addressing the president of the college.

Subjects.

I. Stock Judging.—Scoring and comparison judging of the various types of horses, cattle, sheep, and swine. *Two laboratory credits per week, second term. Required of Freshmen in Agriculture.*

II. Advanced Judging.—Practice in judging breeds and types of the various domestic animals. *Required of Seniors in Animal Husbandry.*

III. Breeds and Care.—An elementary treatment of the subject. *One recitation credit per week, second term. Required of Freshmen in Agriculture.*

IV. Breeds and Breeding.—History and characteristics of the principal breeds of domestic animals. Science and art of practical stock breeding. *Required of Juniors electing Animal Husbandry.*

V. Care of Animals.—Housing, feeding, and managing animals in health and sickness under farm conditions. *Required of Seniors in Animal Husbandry.*

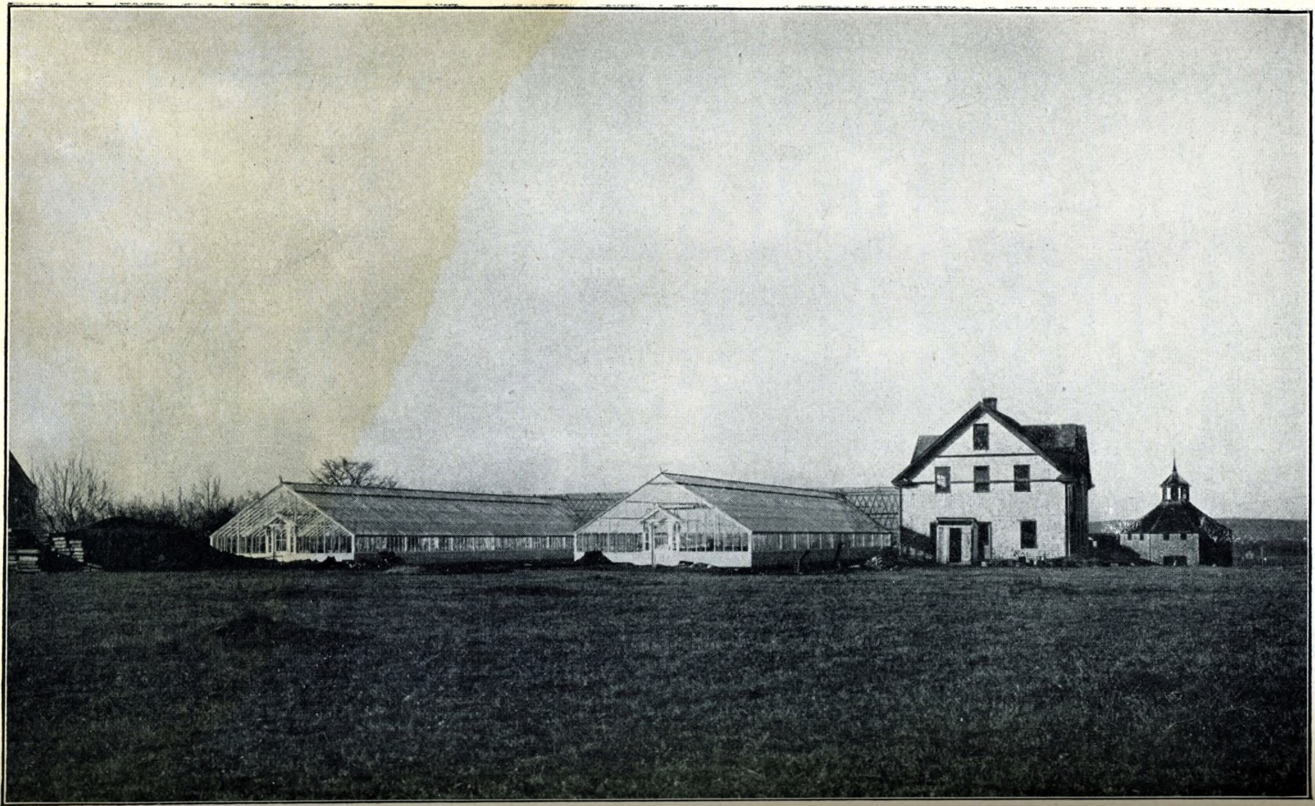
VI. Feeding.—Principles of nutrition. Feeding standards. Rations. *Two recitation credits per week, first term. Required of Juniors in Agriculture.*

VII. Dairy Practice.—Laboratory lectures and practice in handling milk and making butter on the farm. *One and one-half laboratory credits per week, first term. Required of Juniors in Agriculture.* Babcock test.

VIII. Dairy Practice.—Advanced work. *Elective for Seniors in Animal or Poultry Husbandry.*

IX. Research and Literature.—A study of important results in live stock research. *Required of Juniors electing Animal Husbandry.*

X. Veterinary Medicine.—Combating disease from the farmer's standpoint. Obstetrics. Injuries. *Elective for Seniors in Animal Husbandry.*



HORTICULTURAL LABORATORY AND GREENHOUSES.

XI. Farm Buildings.—Plans, location, and estimates on the various farm buildings. (See Mechanical Engineering, VII.) *Elective for Seniors in Animal Husbandry.*

XII. Poultry Craft.—A brief study of breeds, care, and management of all classes of fowls. *One laboratory credit per week, first term. Required of Sophomores in Agriculture.*

XIII. Poultry Practice.—Practice work in handling fowls, incubation, and brooding. *Five credits per week, second term. Time for this subject can not be regularly scheduled. Required of Juniors electing Poultry Husbandry.*

XIV. Poultry Breeding and Literature.—Science and practice of poultry breeding. Study of important literature on poultry investigations. *Required of Juniors electing Poultry Husbandry.*

XV. Judging Poultry.—Practice in scoring and judging all classes of fowls *Required of Seniors in Poultry Husbandry.*

XVI. Poultry Buildings.—Plans, estimates and construction of poultry buildings. (See Mechanical Engineering VI.) *Elective for Seniors in Poultry Husbandry.*

XVII. Instructional Practice.—Seniors in Poultry Husbandry may assist in demonstration work with the Short-Course Class.

XVIII. Thesis.—Original investigation. *Required of Seniors in Animal Husbandry and Poultry Husbandry.*

A. Breeds and Care.—Breeds of horses, cattle, sheep and swine. Housing, care and management of farm animals. *Two recitation credits per week, second term. Required of Short-Course students in Agriculture, first year.*

B. Stock Judging.—Judging of the various classes of animals, and their adaptability for different purposes; as cattle for milk or beef production, horses for driving or draft. *Two laboratory credits per week, second term. Required of Short-Course students in Agriculture, first year.*

C. Dairy Practice.—Babcock test for dairy products, production of sanitary milk and butter making. *One laboratory credit per week, first term. Required of Short-Course students in Agriculture, second year.*

D. Stock Feeding.—Principles of nutrition, compounding of rations. *Two recitation credits per week, first term. Required of Short-Course students in Agriculture, second year.*

E. Breeding and Veterinary Practice.—A study of the principles of breeding, selection, heredity, and variation. Methods of treating common diseases of farm animals. *Two recitation credits per week, second term. Required of Short-Course students in Agriculture, second year.*

F. Poultry Breeds and Care.—A study and comparison of the different breeds of poultry, care of incubators and brooders, methods of feeding for the production of meat and eggs. *One laboratory credit per week, second term. Required of Short-Course students in Agriculture, second year.*

HORTICULTURE.

The aim of the instruction in horticulture is to help the student to understand the practical and scientific problems which arise in the various lines of work included under this subject.

The headquarters of the department are in the new horticultural building which was erected in 1906. The main building contains the office and recitation rooms, together with photographic rooms. Attached to this building are greenhouses of modern construction, containing over 8,000 square feet under glass, 3,000 square feet of which is used by the experiment station for fertilizer experiments. The remainder is devoted to college work, and thus affords an excellent opportunity to become familiar with the growth of plants under glass. The land devoted to the department comprises the college gardens; and the fruit orchards, containing over 150 varieties of fruit, which afford an excellent opportunity for the study of apples and pears especially. There is also a small vineyard. A collection of flowering shrubs enables the student in landscape gardening to study, in the natural state, the material used in this work.

Subjects.

I. Propagation of Plants.—Seedage, methods of seed testing; cuttage, hard and soft wood cuttings; layerage and graftage. *One recitation and one laboratory credit per week, first term. Required of Freshmen in Agriculture.*

II. Vegetable Gardening.—Methods of growing and marketing vegetables. *Two recitation credits per week, second term. Required of Sophomores in Agriculture.*

III. Fruit Culture.—Principles and practice of orcharding and growing of bush fruits. *One recitation credit per week, second term. Required of Juniors in Agriculture.*

IV. Spraying and Pruning.—Spray mixtures, preparation and use; fungicides; insecticides; spraying machinery; methods of pruning different classes of trees and shrubs. *One laboratory credit per week, second term. Required of Juniors in Agriculture.*

V. Greenhouse Construction and Management.—Construction and heating of greenhouses, preparation of plans, watering, ventilating. *Horticultural option for Juniors in Agriculture.*

VI. Floriculture.—A study of greenhouse plants; annuals; herbaceous perennials; bulbs for bedding and forcing. *Horticultural option for Juniors in Agriculture.*

VII. Vegetable Forcing.—Methods of growing vegetables under glass; in houses, hotbeds, and cold-frames. *Horticultural option for Juniors in Agriculture.*

VIII. Literature of Horticulture.—See Agronomy IX.

IX. Investigation.—Special problems upon subjects in which the student is particularly interested. *Horticultural option for Seniors in Agriculture.*

X. Pomology.—Classification and description of orchard fruits. *Horticultural option for Seniors in Agriculture.*

XI. Advanced Vegetable Gardening.—Study of varieties for special purposes; market-garden rotations and equipment. *Horticultural option for Seniors in Agriculture.*

XII. Plant Breeding.—See Agronomy X.

XIII. Landscape Gardening.—The principles underlying landscape gardening as applied to the development of home grounds, school grounds, parks, cemeteries, and estates. *Horticultural option for Seniors in Agriculture.*

A. Vegetable Gardening.—Methods of growing vegetables; hotbed and cold-frame management; garden rotations. *Three recitation credits per week, second term. Required of Short-Course students in Agriculture, first year.*

B. Fruit Culture.—The location of orchards and fruit plantations; methods of tillage, pruning, spraying for insects and fungous diseases. Varieties for home and market. *Three recitation and one laboratory credits per week, second term. Required of Short-Course students in Agriculture, second year.*

Botany.

PROFESSOR MERROW.

The aim of the department is to give a general knowledge of plant life, followed by subjects of an economic nature. The college is well located for carrying on this line of work. The native flora is extensive, and an abundance of material is furnished by the cultivated plants of the gardens and fields of the college farm. The greenhouses supply fresh material for winter use, and the herbarium of 4,000 specimens is a useful reference collection. The laboratory is equipped with dissecting and compound microscopes, a microtome, paraffin bath, and simple physiological apparatus. Charts and models are provided for lecture demonstrations. A good working library, including several American and foreign periodicals, is an important factor in the outfit for botanical instruction.

Subjects.

I. General Botany.—A study of common plants, their structure, physiology, evolution, and adaptation to environment. *Two laboratory credits and one recitation credit per week, throughout the year. Required of Freshmen in Agriculture, Applied Science, and Home Economics.*

II. Economic Botany.—The systematic botany of crops and weeds. *Two laboratory credits and one recitation credit per week, first term. Required of Sophomores in Agriculture, and Applied Science.*

III. Trees and Shrubs.—The determination of native and introduced trees and shrubs in summer and winter condition. *One laboratory or field credit per week throughout the year. Required in a Horticultural option in the Agricultural course.* May be elected by other students having a minimum of six credits in Botany.

IV. Forestry.—*Two recitation credits per week, second term. Required of Juniors in Agriculture. Elective in Applied Science.*

V. Histology.—Seed plants are studied by the usual histological methods of imbedding, sectioning, and staining. *Two and one-half laboratory credits and one recitation credit per week, first term. Elective in Agriculture, and Applied Science.*

VI. Pathology.—Diseases caused by parasitic fungi and the remedies for them. *Two and one-half laboratory credits and one recitation credit per week, second term. Elective in Agriculture, and Applied Science.*

VII. Botanical Literature.—Current literature of periodicals, and bulletins of the U. S. Department of Agriculture and Experiment Stations. *One recitation credit per week, throughout the year. Elective for students with a minimum of nine credits in Botany.* This subject may be elected more than once.

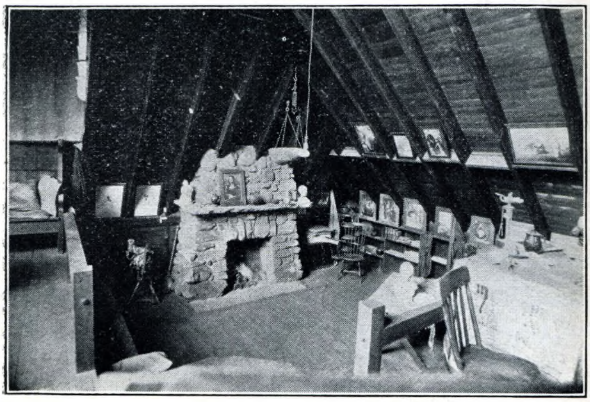
VIII. Special Botany.—Advanced Histology or Pathology may sometimes be given, if applied for.

A. Plant Life.—Elementary Agricultural Botany. *Two laboratory credits and one recitation credit per week throughout the year.* These credits count for entrance to the college courses, and for a certificate in the Short-Course in Agriculture. *Required in the first year of the Sub-Freshman Course, and of the Short-Course in Agriculture.*

Chemistry.

DR. LEIGHTON, MR. BIDWELL.

Instruction in this department begins in the Freshman year with experimental lectures, recitations, and laboratory practice in general and descriptive chemistry. As much attention as is practicable in a



A STUDIO CORNER.

general course is given to the applications of the science to the problems of life. Qualitative analysis extends through one term of the Sophomore year, a portion of the time being devoted to lectures and recitations, but the greater part to practical work in the laboratory. The above subjects are required of all candidates for a degree, as essential to a liberal education, and are preparatory to the subsequent subjects which are designed for students desiring to make chemistry their profession, either as teachers or practical chemists. The department also affords opportunity for work in quantitative analysis, organic chemistry, industrial chemistry, gas analysis, assaying, agricultural chemistry, mineralogy, blowpipe analysis, and metallurgy.

The laboratory is thoroughly equipped with apparatus for the above-mentioned subjects, and opportunity is also given for graduate students to continue in various lines of technical chemistry. A large number of German, French, and English chemical journals are accessible, thus affording excellent opportunity for research work.

Subjects.

I. General Chemistry.—*Two recitation and one and one-half laboratory credits per week, throughout the year. Required of Freshmen in all courses.*

II. Qualitative Analysis.—Basic and acid analysis; analysis of salts, industrial and natural products. *One recitation and two laboratory credits per week, throughout the year. Required of Sophomores in all courses.*

III. Organic Chemistry.—*Three recitation and one laboratory credits per week, second term. Required of Juniors in Chemical Engineering and of Sophomores in Applied Science. Elective for others who have completed Chemistry II.*

IV. Quantitative Analysis.—Gravimetric and Volumetric Analysis. Analysis of minerals, ores, alloys, and industrial products. *Six laboratory credits per week, first term; three laboratory credits per week, second term. Required of Juniors in Chemical Engineering. Elective for others who have completed Chemistry II.*

V. Determinative Mineralogy.—*One and one-half laboratory credits per week, first term. Required of Juniors in Chemical Engineering and Highway Engineering. Elective for others who have completed Chemistry II.*

VI. Gas Analysis.—*One and one-half laboratory credits per week, first term. Required of Juniors in Chemical Engineering. Elective for others who have completed Chemistry II.*

VII. Assaying.—*One and one-half laboratory credits per week, first term.*

Required of Juniors in Chemical Engineering. Elective for others who have completed Chemistry II.

VIII. Metallurgy.—*Two recitation credits per week, first term. Required of Juniors in all Engineering courses. Elective for others who have completed Chemistry II.*

IX. Physical Chemistry.—*Three recitation and one laboratory credits per week, first term. Required of Seniors in Chemical Engineering. Elective for others who have completed Chemistry II.*

X. Organic Chemistry (advanced).—*Three recitation and one laboratory credits per week, first term. Required of Seniors in Chemical Engineering. Elective for others who have completed Chemistry III.*

XI. Organic Chemical Laboratory.—*Three laboratory credits per week, second term. Required of Seniors in Chemical Engineering. Elective for others who have completed Chemistry X.*

XII. Industrial Chemistry.—*Four recitation credits per week, second term. Required of Seniors in Chemical Engineering. Elective for others who have completed Chemistry III.*

XIII. Industrial Chemistry.—The work under this subject may be varied to suit the needs of individual students; including such subjects as technical analysis, textile coloring. *Three laboratory credits per week, second term. Required of Seniors in Chemical Engineering. Elective for those who take Chemistry XII.*

XIV. Agricultural Chemistry.—*Three recitation and one laboratory credits, first term. Required of Juniors in Agriculture.*

XV. Thesis.—*Required of Seniors in Chemical Engineering and those who take the Chemical option in Applied Science.*

A. Chemistry of Plant and Animal Life.—*Three recitation and one laboratary credits per week. Required of Short-Course students in Agriculture, second year.*

Freehand Drawing.

MISS ELDRED.

The object of the freehand drawing is to supply the practice in drawing necessary for subsequent work in the drafting-room and the science laboratories, and to give some knowledge of the elements of art and some appreciation of the beautiful in art and nature. The work for the first term of the Freshman year is designed to meet the later requirements of mechanical and scientific drawing. The engineering students, after short practice in freehand lettering, spend the remainder of the term in pencil outline drawing, paying especial attention to the subject of freehand perspective, as illustrated by geometrical models and other objects. In the agriculture and science courses, the work of the first term comprises outline drawing in pencil from plant and animal forms. The work of the second term in the science courses is planned upon broader lines, and includes, especially for the course in home economics, some attention to the principles of design. Further work in representation and in design is offered in elective subjects. The history of art is taught by lectures illustrated by photographs and casts. The department is well supplied with illustrative material of this kind, and with books of reference.

Subjects.

I. Freehand Lettering: Pencil Drawing from Objects.—*Two laboratory credits per week, first term. Required of Freshmen in Engineering and of Short-Course Engineers.*

II. Pencil Drawing from Objects.—*One laboratory credit per week, first term. Required of Freshmen in Agriculture, Home Economics, and Applied Science; an option for Sub-Freshmen, one laboratory credit throughout the first year.*

III. Drawing in Pencil and Charcoal from Objects and Casts.—*One laboratory credit per week, second term. Required of Freshmen in Applied Science; an option for Sub-Freshmen, one laboratory credit per week, second term; two laboratory credits per week, second term. Required of Freshmen in Home Economics.*

IV. Drawing in Charcoal from Still Life and the Cast.—*Two laboratory credits per week, second term. Elective.*

V. Pen-and-Ink Drawing, Water-Color, or Pastel.—*Two laboratory credits per week, second term. Elective.*

VI. Modeling.—*Two laboratory credits per week, second term. Elective.*

VII. History of Art.—Lectures. *One recitation credit per week, throughout the year. Elective.*

Economics and Social Science.

PRESIDENT EDWARDS.

Subjects.

I. Political Economy.—Text-book, supplemented by lectures, readings, and essays. The first term is devoted to the general principles of the subject; second term, to consideration of present-day problems. *Two recitation credits per week, first term; three recitation credits per week, second term. Required of Seniors in all courses.*

II. Agricultural Economics.—The study of agriculture as an industry, from the point of view of political economy. Includes a study of the agricultural market; transportation of agricultural products; agricultural labor; farm ownership and tenancy; mortgages, etc. *Elective.* President Edwards.

III. Rural Sociology.—Movements of the farm population—causes and results; general social conditions of farmer, such as illiteracy, health, crime, etc.; personal and social traits developed by rural life; means of communication in rural communities; the rural school; agricultural education; the country church; farmers' organizations, federation of rural social forces. *Elective.* President Edwards.

Electrical Engineering.

PROFESSOR TOLMAN, MR. W. S. RODMAN.

Instruction in this department is designed to give a broad knowledge of the theory and application of electrical phenomena and the development of apparatus in electric lighting, the telephone, the transmission of power for electric railways, and other varied uses. The department is well equipped with modern apparatus for electrical measurements and testing. The college lighting plant illustrates a high voltage distribution.

Subjects.

I. Theory of Direct Current Machinery.—A detailed study of the theory of direct current apparatus. The theory, use, care of the dynamo. *Three recitation credits per week for thirty weeks. Required of all Juniors in Electrical Engineering.*

II. Direct Current Laboratory.—A course following Physics V and consisting of tests of various types of direct current apparatus. These include magnetization and characteristic curves of different types of machines. Efficiency, regulation, temperature, and other tests are included in this course. *Three laboratory credits per week for twenty-four weeks. Required of Juniors in Electrical Engineering.*

III. Storage Batteries.—A course of lectures on the theory, care, and operation of storage batteries. *Three recitation credits per week for six weeks, second term. Required of Juniors in Electrical Engineering.*

IV. Theory of Dynamo Design.—Lectures and recitations on the design of dynamos and motors, dealing with the materials of construction, drawing, and calculations necessary in the design of a direct current dynamo or motor. *One recitation credit per week, first term. Required of Juniors in Electrical Engineering.*

V. Drawing.—A detailed study of the construction of a dynamo. The student is required to make actual measurements and drawings of the parts of a dynamo

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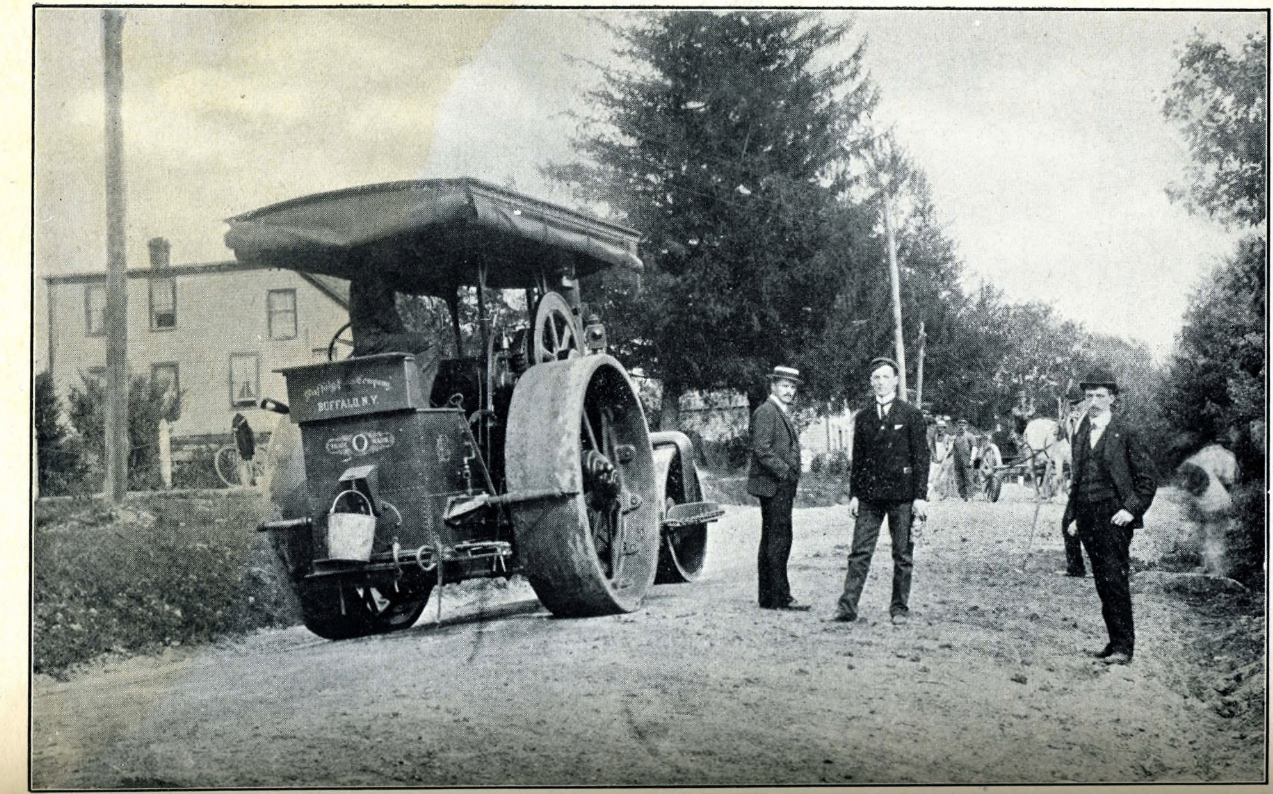


ROAD BUILDING.

and then make an assembly drawing, giving a view of the machine as a whole. *Two laboratory credits per week, first term. Required of Juniors in Electrical Engineering.*

VI. Dynamo Design.—The design of a direct current machine. *Three laboratory credits per week, second term. Required of Juniors in Electrical Engineering.*

VII. General Electricity.—A course covering briefly the care and use of electrical generators, motors, batteries, switchboards, and measuring devices. *Three recitation credits per week, second term. Required of Juniors in Mechanical, Highway, and Chemical Engineering.*

VIII. Theory of Alternating Currents.—Recitations and Lectures. Alternating current theory and practice dealing with alternating current machinery, such as the A. C. dynamos, synchronous and induction motors, converters, and transformers. *Three recitation credits per week throughout the year. Required of Seniors in Electrical Engineering.*

IX. Alternating Current Laboratory.—A course following Physics VIII and consisting of tests of different types of alternating current apparatus. Single and poly-phase generators and motors, synchronous and induction motors, converters, and transformers. *Three laboratory credits per week for thirty weeks. Required of Seniors in Electrical Engineering.*

X. Dynamo Design.—A design of some form of alternating current apparatus. *Three laboratory credits per week, second term. Required of Seniors in Electrical Engineering.*

XI. Telephone Engineering.—Discussion of the development of the telephone and modern telephone practice. *Three recitation credits per week, first term. Required of Seniors in Electrical Engineering.*

XII. Electric Lighting.—Generation and distribution of electric power for lighting purposes. *Three recitation credits per week, first term. Required of Seniors in Electrical Engineering.*

XIII. Electric Power Transmission.—A study of systems of high tension distribution, including the construction of the lines, insulation, protection, and troubles developing in high tension work. *Three recitation credits per week, second term. Required of Seniors in Electrical Engineering.*

XIV. Electric Railways.—Discussion of economic considerations in the development of an electric railway, the construction, location of generating station, the design of the distributing system, types of motors and systems of control. *Two recitation credits per week, second term. Required of Seniors in Electrical Engineering.*

Highway Engineering.

PROFESSOR BLACK.

While much of the student's time in highway engineering is devoted to practical road and bridge design and construction, it is the chief aim to develop his power of acquiring and ability of applying engineering information. The state appropriates annually a sum of money, which is expended under the direction of the instructor and the students of this department, in the construction and maintenance of roads on the college property. This method enables each of our highway-engineering students to get practical experience in every step required in the actual construction of a gravel or macadam road.

Students have the use of the following equipment: compasses, transits, levels, rods, tapes, chains, maps, drawings, profile drawing tables, road roller, and appliances for testing materials used in construction.

Reading on subjects selected by the head of the department is required of all students during the long vacation following the Freshman, Sophomore, and Junior years.

Subjects.

I. Surveying.—Study of instruments, and simple surveying with the chain, compass, transit, and level. Practice in the field includes laying out and dividing land, leveling for profiles, and simple city work. The true meridian is determined both by solar and stellar observations. The office work consists in plotting from the notes taken in the field and of calculating areas from these notes and plots. *Three field credits per week, first term. Required of Sophomores in Engineering; two and one-half credits per week, first term. Required of Sophomores in Agriculture.*

II. Higher Surveying.—Railroad work, including a reconnoissance, preliminary and location survey of a short line of railroad in vicinity of Kingston. A complete preliminary estimate of the cost of the line is made from the notes in the office in the winter, and finished plans drawn. Special attention is also given to surveying for street railroads and highway improvement. *Two recitation and three field credits per week, first term. Required of Juniors in Highway Engineering.*

III. Graphic Statics.—Instruction is given in the elements of graphic statics and its applications in the design of simple framed structures. *Two recitation credits per week, second term. Required of Juniors in Highway Engineering.*

IV. Analysis of Stress.—The graphical determination of the stresses in the various types of bridges under different conditions of loading. *Two recitation credits per week, first term. Required of Juniors in Highway Engineering.*

V. Structural Drawing.—The preparation of finished drawings of modern framed structures, including a tracing of a shop drawing of a highway bridge. *Three laboratory credits per week, second term. Required of Juniors in Highway Engineering.*

VI. Bridge Details.—A critical report on the tracing made in the structural drawing course, and computation of the cost of the bridge. This is followed by a comparative study of the various forms of details employed in the design of bridges. *One recitation and one laboratory credit per week, first term. Required of Seniors in Highway Engineering.*

VII. Bridge Design.—Each student is required to make a complete design of a highway bridge. *Two recitation and two laboratory credits per week, second term. Required of Seniors in Highway Engineering.*

VIII. Masonry Construction.—This course deals with the materials of masonry, including brick, stone, lime, and cement; the theory of masonry structures, including foundations for buildings, bridges, and piers; the construction of retaining walls, culverts, bridge abutments; masonry dams and arches. The student is directed to important articles in the current literature of the subject, and laboratory work is performed at intervals, as facilities and ability of the student permit. *Five recitation credits per week, first term. Required of Seniors in Highway Engineering.*

IX. Road Engineering.—This is a course in practical highway work. It includes the application of engineering principles to the preliminary survey, and estimate of cost of building and rebuilding roads in town and country. The subjects of surfacing old and new roads with gravel or stone and the drainage and repair of them receive particular emphasis. The details of staking out work, placing catch-basins, curbs, culverts, etc., and the crushing and rolling of stone are discussed. The student is directed to state and government reports and required to read selected topics in the literature of the subject. The field work of this course consists in the construction of a gravel or a macadam road on the college grounds. *Two recitation and two field credits per week, first term. Required of Seniors in Highway Engineering.*

X. Water Supply Engineering.—A study of the principles governing the tests of water to determine its potableness and the selection of the proper source for the supply of a city. A study of pumps and pumping machinery, reservoirs, stand pipes, and distribution system. *Four recitation credits per week, second term. Required of Seniors in Highway Engineering.*

XI. Tunneling.—A study of the methods of making tunnel surveys and of the methods employed in modern tunnel construction. *One recitation credit per week, second term. Required of Seniors in Highway Engineering.*

XII. Sewerage.—A study of the methods used in making surveys for sewer systems and the principles governing their construction. *Three recitation credits per week, second term. Required of Seniors in Highway Engineering.*

XIII. Contracts.—Instruction is given in the fundamental principles governing the law of contracts and of the correct forms of the various kinds of contracts used in engineering. *Two recitation credits per week, second term. Required of Seniors in Highway Engineering.*

XIV. Thesis.—The preparation of a thesis on some subject connected with the work of this department, involving original investigation or experiment. *Three credits per week throughout the year. Required of Seniors in Highway Engineering.*

XV. Vacation Reading.—Systematic reading during vacations on some topic assigned by the head of this department.

Mechanical Engineering.

PROFESSOR DRAKE, MR. T. C. RODMAN, MR. CHITTENDEN,
MR. KNOWLES.

Instruction in the fundamental theories of engineering is given by means of text-books, lectures, and reference reading. Laboratory work is required in mechanical drawing, woodworking, forging, machine shop, strength of materials, steam engineering, and engineering tests. The shops are exceptionally well equipped, and the nature of the work done is such as to give the student a fair degree of manual skill, and to illustrate the operations of present-day shop practice. The production of power by use of the steam or gas engine receives marked attention, the power plants, and the college pumping station furnishing opportunities for practical tests.

Subjects.

I. Mechanical Drawing.—Elementary principles, use of tools, geometrical problems, projections, screw threads, bolts and nuts, machine parts. *Three laboratory credits, second term. Required of Freshmen in Engineering; one and one-half laboratory credits, second term. Required of Freshmen in Agriculture.*

II. Mechanical Drawing.—Machine details, tracing, blue printing. *Two and one-half laboratory credits, second term. Required of Sophomores in Engineering.*

III. Mechanical Drawing.—Descriptive Geometry of the point, line, plane, and geometrical solids. Intersection of solids, development of surfaces, oblique projection, isometric projection. *Three recitation credits, second term. Required of Sophomores in Engineering.*

IV. Mechanical Drawing.—Machinery design. *Two and one-half laboratory credits throughout the year. Required of Juniors in Mechanical Engineering.*

V. Architectural Drawing.—Plans for dwellings. Lectures on the design and construction of the modern American home. *Two laboratory credits, first term. Required of Freshmen in Home Economics.*

VI. Poultry House Construction.—Practical work in designing the various buildings for a poultry plant. Estimates of materials, fixtures and costs. *Elective for Seniors in Agriculture.*

VII. Farm Buildings.—Plans, estimates, bills of material, specifications, costs. *Elective for Seniors and Juniors in Agriculture.*

VIII. Shop Practice.—Woodworking, benchwork, use of tools, carpentering. *Three shop credits, first term. Required of Freshmen in Engineering. Two and one-half shop credits, second term. Required of Sophomores in Agriculture. One shop credit throughout the year. Required of Freshmen in Teachers' Course in Applied Science.*

IX. Shop Practice. — Woodturning in soft and hard woods. *Three shop credits, three weeks, second term. Required of Freshmen in Engineering.*

X. Shop Practice.—Pattern-making and principles of molding. Patterns are made for some machine designed in the drawing room. *Two shop credits, first term. Required of Juniors in Mechanical Engineering.*

XI. Shop Practice.—Forging, drawing, bending, welding, and tool dressing. *Three shop credits, fifteen weeks, second term. Required of Freshmen in Engineering.*

XII. Shop Practice.—Forging for students in agriculture. Iron work for farm requirements. Repairs to farm machinery. *One shop credit, second term. Required of Juniors in Agriculture.*

XIII. Shop Practice.—Machine Shop. Hand work in chipping, filing, scraping, and finishing. Use of machine tools. Machine construction. *Three shop credits, second term. Required of Sophomores in Engineering. Two and one-half shop credits, first term; three shop credits, second term. Required of Juniors in Mechanical Engineering. One and one-half shop credits, first term; three shop credits, second term. Required of Seniors in Mechanical Engineering.*

XIII a. Shop Practice. — Machine-shop work for students in agriculture. Chipping and filing, tapping and cutting threads, drilling, machine work, and pipe fitting. *One and one-half shop credits, first term. Required of Juniors in Agriculture.*

XIV. Woodcarving. — Care and use of tools, geometrical motives, diaper patterns, incised carving, flat and curved surfaces, historic ornament, low and high relief. *Elective for students in Home Economics and Applied Science.*

XV. Steam Boilers.—Types, construction, strength, uses, and management. *Three recitation credits, six weeks, first term. Required of all Juniors in Engineering.*

XVI. Thermodynamics.—Fundamental principles and formulæ. Direct applications to steam and gas engines. *Three recitation credits, twelve weeks, first term. Required of all Juniors in Engineering.*

XVII. Steam Engines.—Types, valve gears, regulators, turbines, power plants, tests. *Three recitation credits, second term. Required of all Juniors in Engineering.*

XVII a. Gas Engines.—Internal combustion motors for gas, gasoline, alcohol, and oils; gas producers, ignition, and governors. *Five recitation credits, eight weeks, first term. Required of Juniors in Mechanical and Highway Engineering.*

XVIII. Strength of Materials.—Text-book study of the theory of the strength of rods, pipes, cylinders, beams, columns, shafts, and simple framed structures. Laboratory tests of wood, iron, steel, alloys, brick, stone, and cements. *Three recitation and one laboratory credits, first term. Required of Seniors in Mechanical, Highway, and Chemical Engineering.*

XIX. Applied Mechanics.—The mechanics of bodies at rest and in motion. Friction of rest and of motion. Energy, work, and power. Elements of graphic statics. Illustrations are made by the use of many common problems from engineering practice. *Five recitation credits, twelve weeks, second term. Required of all Juniors in Engineering.*

XX. Mechanism.—Analysis of motions in machines. Practical mechanism of gears, cams, bearings, shafting, pulleys, belts, ropes, and chain drives. *Five recitation credits, eight weeks, first term. Required of Juniors in Mechanical and Highway Engineering.*

XXI. Hydraulics.—Flow of water through pipes and orifices, and over weirs. Discharge of sewers, rivers, and streams. Water wheels and water power. *Five recitation credits, six weeks, second term. Required of all Juniors in Engineering.*

XXII. Heating and Ventilation.—General principles of heating by means of steam, hot air, and hot water. Computations of heating surface. Heating systems for shops and mills. *Five recitation credits, two weeks, first term. Required of Juniors in Mechanical and Highway Engineering.*

XXIII. Mill Construction.—Lectures upon the structural development of industrial buildings. The subjects of foundations, walls, floors, roofs, lighting, fire protection, and sanitary features are taken up and thoroughly discussed. *Five recitation credits, six weeks, second term. Required of Seniors in Mechanical Engineering.*

XXIII a. Mill Equipment.—Lectures treating of the general equipment of a manufacturing plant with the necessary power and power transmission machinery, repair shops, and machine tools. A course can be given, if required, pertaining to the installing of textile machinery. *Five recitation credits, six weeks, second term. Required of Seniors in Mechanical Engineering.*

XXIV. Contracts, Specifications and Business Law.—Lectures intended to present the subject as an aid to the constructive engineer. *Five recitation credits, two weeks, second term. Required of Seniors in Mechanical and Highway Engineering.*

XXV. Industrial Economics —Management of shops, draughting-room methods, tool-room systems, card records for time keeping, stock, and cost of manufacturing, advertising and sales department. *Five recitation credits, four weeks, second term, Required of Seniors in Mechanical Engineering.*

XXVI. Engineering Tests.—Practical testing of engines, boilers, pumps, machinery, fuels, and materials used in engineering work. *One recitation and two laboratory credits, first term. Required of Seniors in Mechanical Engineering.*

A. Drawing.—Freehand sketching of machine parts, projections, lettering, use of instruments, geometrical problems, machine-drawing tracing, and blue printing. *Three laboratory credits per week throughout the year. Required of Short-Course students in Engineering, first year. One laboratory credit per week throughout the year. Required of young men in Sub-Freshman course, first year.*

B. Shop Practice.—The Short-Course Engineering student elects work in carpentering, machine shop, or machine draughting. *Four and one-half shop credits per week, first term; three shop credits per week, second term. Required of Short-Course students in Engineering, first year.*

C. Shop Practice.—Carpentry, machine shop, machine draughting, or steam engineering. The student continues in the same line of work as was chosen the first year, except that those who are to take steam engineering, now substitute it in place of the machine shop. *Four and one-half shop credits per week throughout the year. Required of Short-Course students in Engineering, second year.*

D. Machine Tools.—A study of the types and principles of operations of the machine tools to be found in a machine shop. Text-books, lectures, and reference reading. *Three recitation credits per week throughout the year. Required of Short-Course students in Engineering, first year.*

E. Engineering Theory.—Properties of material, fuel, lubricants, steam engines, boilers, gas engines, mechanism, practical electricity, shop methods. *Five recitation credits per week throughout the year. Required of Short-Course students in Engineering, second year.*

F. Carpentry.—A brief course in use of tools and joinery. *One shop credit per week throughout the year. Required of young men in Sub-Freshman course, second year.*

G. Woodcarving.—*One laboratory credit per week throughout the year. Required of young women in Sub-Freshman course, second year.*

H. Farm Buildings.—A practical course in the planning of farm structures, estimating quantities of material required, and costs. *One shop credit per week, first term; one and one-half shop credits, second term. Required of Short-Course students in Agriculture, first year.*

I. Shopwork.—Woodworking at the bench and lathe. *One and one-half shop* *credits per week throughout the year. Required of Short-Course students in Agriculture, first year.*

J. Forging and Machine Shop.—*Two and one-half shop credits per week for twenty-four weeks. Required of Short-Course students in Agriculture, second year.*

Geology and Mineralogy.

DR. WHEELER, MR. BIDWELL.

GEOLOGY.—Under this subject historical geology is considered in outline, attention being given, also, to those phases of dynamical and structural geology which are particularly important. Special attention is given to rock weathering and soil formation, and to those characteristics of rocks which are of chief importance in connection with road construction.

DETERMINATIVE MINERALOGY.—A short course dealing with the elements of crystallography is given, together with the physical and chemical characteristics of minerals, especially of the rock-making minerals composing our soils. Laboratory work in blowpipe analysis and physical determination of minerals follows the crystallography.

Subjects.

I. Geology.—*Two recitation credits per week, second term. Required of Juniors in Highway Engineering.*

II. Mineralogy.—See Chemistry V.

History.

MISS COOPER.

Subjects.

I. Social and Economic History of the United States.—*Two recitation credits per week, first term; and three recitation credits per week, second term. Required of Juniors in all courses.*

II. Modern European History.—A general survey extending from the close of the fifteenth century to the present day. *Two recitation credits per week, first term; and three recitation credits, second term. Required of Juniors in all courses.*

I or II will be given, as the class elects.

III. Government and Politics in the United States.—*Three recitation credits per week, first term; and two recitation credits per week, second term. Required of Seniors in all courses.*

A. English History.—*Four recitation credits per week, first term; and two recitation credits, second term. Required of all Sub-Freshmen, first year.*

Languages.

PROFESSOR WATSON, MISS COOPER, MISS SENTON.

The subjects grouped under this head are English, German, French, and Latin.

In all the college courses leading to a degree, four years of English and two years of foreign language study are required.

The aim of the department must necessarily vary with the language taught. In English, the student is expected to gain increased facility in the correct use of his mother tongue as well as a large acquaintance with its best literature. In French and German, while practice in speaking and writing is constant, special emphasis is put upon a study of some of the literary masterpieces; and incidentally a good foundation is laid for the easy reading of scientific texts. The required year's work in Latin is looked upon as furnishing a valuable preparation for later language study and as being helpful in understanding scientific terms.

The library is a most important factor in the work of the department, as the English language and literature are represented in it by over one thousand carefully selected volumes, and the French and German literatures by about six hundred.

Subjects.

ENGLISH.

I. Rhetoric.—Text-book study and practical application of rhetorical principles in exercises and themes. *Two recitation credits per week throughout the year. Required of Freshmen in all courses.*

II. Critical study of certain prose masterpieces by Carlyle, Emerson, Lamb, Holmes, Thoreau, Burroughs, and Warner; with essays and various short papers. *Two recitation credits per week throughout the year. Required of Sophomores in all courses.*

III. Argumentation.—Essays, orations, and debates required. *Three recitation credits per week, first term. Required of Juniors in all courses.*

IV. American Literature.—General study of the subject. Essays required. *Two recitation credits per week, second term. Required of Juniors in all courses.*

V. General English Literature.—Largely a study of Chaucer, Shakespeare, Milton, Wordsworth, Tennyson, Browning, and their times. Essays and collateral reading required. *Three recitation credits per week, first term; two recitation credits per week, second term. Required of Seniors in all courses.*

VI. Special English Literature.—Study of special periods and authors. *Three recitation credits per week, first or second term. Elective; open to students who have taken courses I–V or their equivalent.*

A. Elementary English.—Grammar, dictation, composition, and reading of masterpieces. Constant practice in writing and oral expression. *Four recitation credits throughout the year. Required of Short-Course students in Agriculture and Engineering, first year.*

B. Elementary English.—A continuation of A, including, also, some instruction in civics and economics. *Three recitation credits throughout the year. Required of Short-Course students in Agriculture and Engineering, second year.*

C. College Entrance Requirements in English.—With composition work. *Five recitation credits per week throughout the year. Required of Sub-Freshmen, first year.*

D. Continuation of C.—*Three recitation credits per week throughout the year. Required of Sub-Freshmen, second year.*

MODERN LANGUAGES.

GERMAN.

I. Elementary German.—Grammar, dictation, conversation, reading of easy prose and poetry. *Four recitation credits per week throughout the year. Required of Freshmen in all courses who do not take French.*

II. Reading of intermediate texts, composition, conversation, study of one of Schiller's masterpieces or similar work.—*Three recitation credits per week throughout the year. Open to students who have taken I or its equivalent and required of Sophomores in all courses who do not take French.*

III. German Classics.—Goethe, Schiller, Lessing. *Three recitation credits per week throughout year. Elective; open to students who have taken I and II or their equivalent.*

IV. German Prose.—Freytag, Von Scheffel, Dahn. *Three recitation credits per week throughout the year. Elective; open to students who have taken I–III or their equivalent.*

V. Scientific German.—Intermediate reading in connection with II, or special work assigned by different professors.

FRENCH.

VI. Elementary French.—Grammar, dictation, conversation, reading of easy prose and poetry. *Four recitation credits per week throughout the year. Required of all Freshmen not taking German or Latin and not offering French for entrance.*

VII. Reading of intermediate texts, composition, conversation.—*Three recitation credits per week throughout the year. Open to students who have taken VI or its equivalent and required of Sophomores in all courses who do not take German.*

VIII. French Classics.—Corneille, Racine, Molière. *Three recitation credits per week throughout the year. Elective; open to students who have taken VI and VII.*

IX. French Prose.—Hugo, Sand, Balzac, Loti. *Three recitation credits per week throughout the year. Elective; open to students who have taken VI–VIII or their equivalent.*

X. Scientific French.—Intermediate reading in connection with VII, or special work assigned by different professors.

LATIN.

I. Cæsar or selections from various Latin authors.—*Three recitation credits throughout the year. Elective.*

A. Elementary Latin.—*Five recitation credits throughout the year. Required of Sub-Freshmen, second year.*

Mathematics.

PROFESSOR TYLER, PROFESSOR BLACK, MR. FIELD.

The work in this department covers three distinct phases of mathematical training: the College, the Sub-Freshman and the Short-Course instruction. Throughout the regular college work, emphasis is laid both on the theory and direct application of the different subjects to problems that arise in agriculture and the various branches of engineering. It is the aim to prepare the Sub-Freshmen as thoroughly for college mathematics as is done in the better high schools of the state. An attempt is made to present a working knowledge of algebra, geometry, trigonometry and their practical use to Short-Course students without requiring them to prove the principles involved.

Subjects.

I. Algebra.—Review work; higher algebra, including logarithms. *Three recitation credits per week, first term. Required of Freshmen in Agriculture.*

II. Plane Trigonometry.—Theory and application. *Three recitation credits per week, second term. Required of Freshmen in Agriculture.*

III. Higher Algebra and Solid Geometry.—*Five recitation credits per week, first term. Required of Freshmen in Engineering, Applied Science, and Home Economics.*

IV. Plane Trigonometry and Analytics.—*Five recitation credits per week, second term. Required of Freshmen in Engineering, Applied Science, and Home Economics.*

V. Analytics and Calculus.—*Five recitation credits per week, first term. Required of Sophomores in Engineering.*

VI. Calculus (completed).—*Five recitation credits per week, second term. Required of Sophomores in Engineering.*

VII. Differential Equations.—*Two recitation credits per week, first term. Required of Juniors in Electrical Engineering.*

A. Algebra.—To quadratics. *Five recitation credits per week throughout the year. Required of Sub-Freshmen, first year. An additional one-half laboratory credit during the first term.*

B. Algebra.—Quadratic equations, theory of quadratic equations, inequalities, ratio and proportion and the progressions. *Three recitation credits per week throughout the year. Required of Sub-Freshmen, second year.*

C. Algebra.—Elementary work planned to meet the needs of Short-Course students. *Four recitation credits per week, first term. Required of students in the Short Courses in Agriculture and Engineering, first year.*

D. Geometry, Mensuration.—*Four recitation credits per week, second term. Required of students in Short Courses in Agriculture and Engineering, first year.*

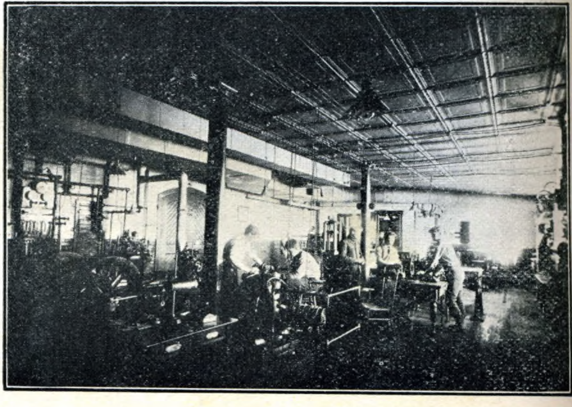
E. Plane Geometry.—*Four recitation credits per week, throughout the year. Required of Sub-Freshmen, second year.*

F. Plane Trigonometry, Applied Mathematics, Elementary Surveying, and Drainage.—*Four recitation credits throughout the year. Required in Short Courses in Agriculture and Engineering, second year.*

Military Science and Tactics.

MAJOR BLACK.

All male students are required to attend exercises in military instruction for four years, or such portion thereof as they are in college, unless excused by reason of physical disability. Credit is



PHYSICAL AND ELECTRICAL LABORATORIES.

given for this work on the same basis and under the same regulations as in other departments.

The war department furnishes for use in this instruction cadet rifles, equipments, sabres, ordnance; and details an officer of the army to act as instructor when the number of cadets is one hundred or more. The cadets are organized this year into a battalion of two companies of infantry. Theoretical instruction is given by means of lectures and recitations and practical instruction by means of infantry drills in the school of the squad, the company, and the battalion. The aim of these military exercises is to improve the physique, to inculcate the habit of prompt and cheerful obedience and courtesy to rightfully constituted authority, and to exercise an elevating influence on the conduct of the corps of cadets.

Competitive drills are held annually between the companies of the battalion. The name of the best drilled company and its commander is placed on the battalion colors. Company A commanded by Cadet Captain C. L. Coggins, was the winner in the annual color contest, held May 9, 1906.

Subjects.

Practical Instruction.—Drills in the school of the squad, of the company, and of the battalion. *Two exercises of one hour each per week, counting as one credit, throughout the year. Required of all the command.*

Theoretical Instruction.—A study of the U. S. Infantry Drill Regulations. *One recitation credit per week throughout the year. Required of all Freshmen.*

Battalion Organization, April, 1907.

COMMANDANT

Fingal C. Black, formerly First Lieutenant, 3d U. S. V. Engineers.

CADET OFFICERS.

H. R. Lewis	Major.
C. H. Field	Captain.
L. A. Whipple	Captain
T. C. Brown, Jr.	First Lieutenant and Adjutant
H. A. Fiske	First Lieutenant and Quartermaster.
E. A. Gory	First Lieutenant.
C. W. Mitchell	First Lieutenant.
H. W. Gardiner	Second Lieutenant.
Lewis Slack	Second Lieutenant.

CADET NON-COMMISSIONED OFFICERS.

J. M. Craig	Sergeant-Major.
R. F. Gardiner	Quartermaster-Sergeant.
E. F. Smith	First Sergeant.
S. Quinn	First Sergeant.
G. J. Schaeffer	Sergeant.
E. R. Butts	Sergeant.
R. W. Goodale	Sergeant.
H. F. French	Sergeant.
A. M. Howe	Corporal.
W. G. Taylor	Corporal.
C. B. Edwards	Corporal.
J. W. Salisbury	Corporal.
H. R. Tisdale	Corporal.
E. F. Caton	Corporal.
L. E. Moyer	Corporal.
D. E. Warner	Corporal.

Physics.

PROFESSOR TOLMAN, MR. W. S. RODMAN.

The instruction given in this department is intended to acquaint the students with the fundamental concepts of physical science. The work will be as broad as is consistent with the time and needs of the students.

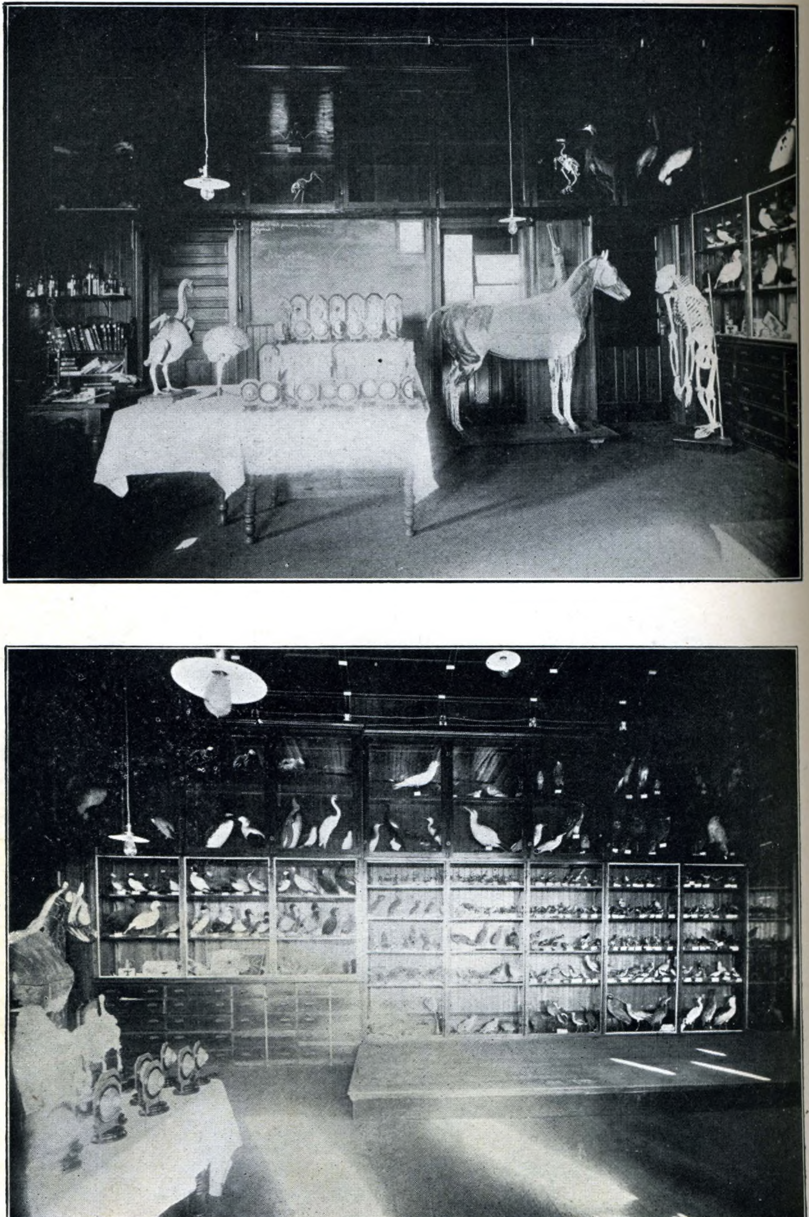
The department is supplied with apparatus for exact measurements in mechanics, heat, sound, light, electricity, and magnetism.

Subjects.

I. Descriptive Physics.—A course designed for students in Agriculture. Considerable time is given to the discussion of the principles of mechanics as applied to farm machinery. The course furnishes an excellent foundation for further work in agricultural physics. *Five recitation credits per week, second term. Required of Sophomores in Agriculture.*

II. General Physics.—A mathematical treatment of the subject. *Four recitation credits per week throughout the year. Required of all Sophomores in Engineering and Teachers' Course in Applied Science.*

III. Laboratory Physics.—A course in physical measurements intended to give students methods and to form a basis for future engineering work. The calculation of results will be given special attention. *One and one-half laboratory credits per week throughout the year. Required of Sophomores in Engineering and Teachers' Course in Applied Science.*



THE BIOLOGICAL LABORATORY.

IV. Electrical Measurements.—A course of lectures treating of the theory and manipulation of electrical measuring instruments. A discussion of results; errors—their reduction or elimination. *Two recitation credits per week, first term. Required of Juniors in Electrical Engineering.*

V. Electrical Measurements Laboratory.—Direct currents measurements, resistance, potential, current, magnetic properties of iron and steel, calibration of direct current instruments. *Three laboratory credits per week for twelve weeks, first term. Required of Juniors in Electrical Engineering.*

VI. Electrical Measurements Laboratory.—Alternating currents measurements, self-induction, mutual-induction, capacity. Calibration of alternating current instruments. *Three laboratory credits for six weeks, first term. Required of Seniors in Electrical Engineering.*

A. Elementary Physics.—A descriptive course covering the subjects, mechanics of liquids and gases. *Two recitation and one laboratory credits per week, second term. Required of Sub-Freshmen and Short-Course students in Engineering, first year.*

B. Elementary Physics.—A descriptive course in continuation of Physics I, completing an elementary course in the subject. *Two recitation and one-half laboratory credits per week throughout the year. Required of Sub-Freshmen and Short-Course students in Engineering, second year.*

Psychology.

PRESIDENT EDWARDS.

I. Elementary Course.—Lectures, recitations, simple laboratory experiments. *Given alternate years; next given in* 1908. *Elective for Juniors and Seniors.*

Stenography and Typewriting.

MISS TOLMAN.

Stenography and typewriting are offered as electives. A thorough knowledge of the common English branches is required of every one taking the subjects. The Chandler system of stenography and either the touch or sight system of typewriting are taught. Absolute accuracy is required from the first in both subjects, and particular attention is paid to spelling and punctuation.

Subjects.

I. Elementary.—Instruction in principles; dictation. *Four recitation credits per week throughout the year. Elective.*

II. Advanced.—Dictation, including the following: business letters, legal documents, terms used, deeds, wills, mortgages, contracts, declarations; hints useful in office work; general dictation. *Three recitation credits per week throughout the year.*

Zoölogy.

PROFESSOR BARLOW.

The work in this department is designed to meet the needs of two classes of students, those who are interested in the economic aspect of animal life and those who purpose to become teachers of biology. To meet the needs of the first class, subjects are given which are planned to call attention to the economic importance of the different orders. Much time is allotted to entomology, and in this subject special attention is given to injurious species. For those who are to be teachers, a thorough training is given in the morphology and classification of animals as a preparation for the more special subjects that follow. In these attention is directed to the habits and relations of animals, which are studied both in the field and laboratory.

The laboratory is equipped with a series of charts, valuable models and many mounted skeletons. The Rhode Island birds are represented by mounted specimens of practically every species; fishes, reptiles, and batrachians, by alcoholic preparations. The collection of insects, begun recently, now fills about eighty cases, and is being steadily increased. Each student is given the use of compound and dissecting microscopes and necessary instruments for laboratory work.

Subjects.

I. General Zoölogy.—A study of representative forms of the more important phyla. *Two laboratory credits and one recitation credit per week, first term. Required of Sophomores in Agriculture.*

II. Animal Biology.—The relations of animals to their surroundings is the central idea of this course. *Two laboratory or field credits, and one recitation credit per week throughout the year. Required of Sophomores in Applied Science.*

III. Physiology.—The physiology of the higher mammals. *One laboratory credit and three recitation credits per week, second term. Required of Sophomores in Agriculture.*

IV. Economic Entomology.—*One laboratory credit and three recitation credits per week, second term. Required of Juniors in Agriculture.*

KINGSTON VILLAGE.

V. General Entomology.—*Two laboratory credits and two recitation credits per week throughout the year. Elective.*

VI. Systematic Entomology. — *Three laboratory credits per week throughout the year. Elective for those who are taking, or have taken, Zoölogy V.*

VII. Vertebrate Anatomy.—*Two laboratory credits and one recitation credit per week, first term. Elective.*

VIII. Histology and Embryology.—*Two laboratory credits and one recitation credit per week, second term. Elective.*

IX. Methods in Nature Study.—Bird life, habits of insects, aquaria. *Two laboratory or field credits and one recitation credit per week, second term. Required of Sophomores in the Teachers' Course in Applied Science.*

A. Elementary Zoölogy.—Deals with forms of economic importance. *Two recitation and two and one-half laboratory credits per week, first term. Required of Short-Course students in Agriculture, first year.*

Organizations.

Athletic Association.

Joseph Drake Drew	President.
James McIntyre Craig	Vice-President.
Prof. John Barlow	Secretary-Treasurer.

Science Club.

Dr. Burt L. Hartwell	Secretary.

Members of the Faculty, Juniors, and Seniors are eligible to membership.

Young Men's Christian Association.

Calvin Lester Coggins	President.
Harry Robert Tisdale	Vice-President.
Walter John Moran	Secretary.
Harry Reynolds Lewis	Treasurer.

Young Women's Christian Union.

Ethel Aldrich Tucker	President.
Mary Albro Sherman	Vice-President.
Ruby Belle Rockwell	Secretary.
Orpha Lillie Rose	Treasurer.

Alumni Association.

Henry Maxson Brightman, 1900 Grand Rapids, Mich.	President.
George Washington Barber, 1898 Shannock, R. I.	Vice-President.
Lillian Mabelle George, 1899 Kingston, R. I.	Secretary–Treasurer.

Executive Committee.

H. M. Brightman, 1900,
G. W. Barber, 1898,
Jean Gilman, 1905.
L. M. George, 1899,
Ebenezer Payne, 1899,

Students.

Graduates.

Bidwell, George Leslie, B. S. (Tufts, '05), Chemistry	Kingston.
Bosworth, Alfred Willson, B. S. ('99), Chemistry	Geneva, N. Y.
Hammond, H. S., B. S. A. (University Toronto, '06), Chemistry	Kingston.
Rodman, Walter Sheldon, B. S. ('04), Elec. Eng.	Kingston.

Seniors.

Barber, Arthur Houghton, Mech. Eng.	East Greenwich.
Coggins, Calvin Lester, Elec. Eng.	Sharon, Mass.
Ferry, Jay Russell, High. Eng.	Marion, Conn.
Kellogg, David Raymond, Chem.	New London, Conn.
Kendrick, Winfield Smith, Elec. Eng.	South Chatham, Mass.
Lamond, John Kenyon, Elec. Eng.	Usquepaugh.
Lewis, Harry Reynolds, Agr.	Providence.
Macomber, Miner Sanford, Chem.	Hartford, Conn.
Tucker, Ethel Aldrich, Gen. Sci.	Kingston.

Juniors.

Drew, Joseph Drake, Chem.	Brockton, Mass.
Field, Clesson Herbert, High. Eng.	Brockton, Mass.
Fiske, Herbert Andrew, Elec. Eng.	Olneyville.
Gardiner, Robert Franklin, Chem.	Wakefield.
Gory, Edward Allen, Elec. Eng.	Pascoag.
Kenyon, Susan Elmora, Biol.	Usquepaugh.
Mitchell, Clovis William, High. Eng.	Harrisville.
Sheldon, George Ware, Elec. Eng.	Wakefield.
Sherman, Mary Albro, Agr.	Lehigh Hill, Portsmouth.
Smith, John Lebroc, Elec. Eng.	Narragansett Pier.
Whipple, Lucius Albert, High. Eng.	Greenville.

Sophomores.

Cargill, Rhobie Lucelia, Gen. Sci.	Abbott Run.
Caton, Earle Francis, Eng.	Edgewood.
Craig, James McIntyre, Agr.	Riverpoint.
Crandall, Fred Kenyon, Agr.	Westerly.
French, Henry Frank, Eng.	Providence.
Gardiner, Henry Wallace, Eng.	Wakefield.
Howe, Albert Mendel, Eng.	Brockton, Mass.

Knowles, Walter, Eng.	Kingston.
Moran, Walter John, Eng.	New London, Conn.
Moyer, Louis Earl, Eng.	Dexter, N. Y.
Rockwell, Ruby Belle, Chem.	Sylvania, Penn.
Rose, Orpha Lillie, Gen. Sci.	Kingston.
Slack, Lewis, Eng.	Kingston.
Smith, Elmer Francis, Eng.	East Lyme, Conn.
Tisdale, Harry Robert, Chem.	New London, Conn.
Tucker, Ellen Capron, Gen. Sci.	Kingston.

Freshmen.

Carpenter, Randolph Haywood	East Providence.
Champlin, Robert Payne	Block Island.
Cummings, Robert Winthrop	Orange, Mass.
Denniston, LeRoy P.	Maynard, Mass.
Easterbrooks, Harold Arnold	Providence.
Edwards, Clarence Bland	Kingston.
Fairchild, Stanley	Westport, Conn.
Fitzpatrick, James Thomas	Carolina.
Flemming, Byron Mason	Valley Falls.
Flemming, Willard Allan	Valley Falls.
Goodale, Ralph Waldo	Leominster, Mass.
Heath, Bertha May	Lunenburg, Mass.
Henry, Warren	Hopedale, Mass.
Kenyon, Amos Harris	Usquepaugh.
Lamond, Helen Scott	Usquepaugh.
Mott, Elno Carter	Block Island.
Mounce, Leroy Leidman	North Marshfield, Mass.
Peabody, George Abbott	Middleton, Mass.
Ryan, James Daniel	New London, Conn.
Sherman, John Leland	Providence.
Smith, Hiram Jameson	Woonsocket.
Stetson, Clifton Orrison	Randolph, Mass.
Taylor, Walter Gray	Middletown.
Tucker, Harriet Taber	West Kingston.
Wagner, Albert Frederic	Berkeley.
Worrall, David Elbridge	Woonsocket.

Specials.

Browne, Mary Katharine	Providence.
Chittenden, Leah	Kingston.
Davis, Augustus Boss	Kingston.
Dexter, Leon Arthur	Moosup Valley.
Easterbrooks, Louis Church	Providence.
Grinnell, Clairmont Livesey	Middletown.
Lewis, George Mitchell	Kingston.
Miner, Arthur Jacob	Rochester, N. Y.

Pitou, Maurice Inslee	New York City.
Salisbury, James William	Bristol.
Wheeler, Richard Howes	New London, N. H.

Preparatory.

Andrade, Roberto Augusto	Ecuador, South America.
Andrews, Carmen Nichols	Slocums.
Barker, Stephen Congdon	Middletown.
Borba, Eugenio	Rio Janeiro, Brazil.
Briggs, Sarah Elsie	Kenyon.
Bristle, Fred William	Carolina.
Brown, Thomas Clarke, Jr.	East Greenwich.
Brownell, Ralph Herbert	Little Compton.
Bullock, Rhoda Bishop	Wakefield.
Butts, Eberhard Raynor	East Greenwich.
Collins, Nathan Alfred, Jr.	Wood River Junction.
Comber, Edward Anthony	Narragansett Pier.
Curtice, Kolbe	Kingston.
Daniels, Willis Washington	Pawtucket.
Drake, Howard Prouty	Kingston.
Drummond, Oliver Murray	Providence.
Edson, Leon Davis	Whitman, Mass.
Fagan, Hugh Jean	Peace Dale.
Gifford, Gordon Babcock	New York City.
Gilman, M. Elvin	Gilman, Me.
Harris, Burton Kenneth	Lime Rock.
Harris, Gertrude Alice	Lime Rock.
Hincks, Willis Franklin	Providence.
Kennedy, William Franklin	Wakefield.
Kent, Rachel Evelyn	Kingston.
Mitchell, Irving Calvary	Harrisville.
Mowry, William Wheatley	Woonsocket.
Miller, Wilfred Mason	East Greenwich.
Neal, William Thomas	Pittsfield, Mass.
Perry, George Elliot	Chicago, Ill.
Quinn, Stephen	Wakefield.
Rawdon, Herbert Edward Carson	Providence.
Rollinson, Florence	Wakefield.
Safford, Howard Albert	Providence.
Sanford, Thomas Whitridge	Adamsville.
Schaeffer, George Joseph	Peace Dale.
Sherman, Julia Frances	West Kingston.
Southard, Horace	Providence.
Stubbs, Paul Thomas	Thomaston, Conn.
Swan, William Cannon	Newport.
Torres, Antonino	Guayaquil, Ecuador.
Townend, Daniel	Providence.

Warner, David Edmond, Jr.	Bridgeton.
Wilson, Winfield Tracy	Wakefield.
Wood, Edith Channing	Slocums.

Course in Poultry Keeping.

Beaudry, Leon Edward	Portland, Ore.
Blackman, Charles August	Needham, Mass.
Critcherson, William Dana	Westerly.
Deacon, Meres Stoddard	Bridgeport, Conn.
Denby, Garfield	Warren.
Draper, Fred Zenas	Pawtucket.
Falconer, George Watson	Milford, N. H
Fellows, Folger P.	Canandaigua, N. Y.
Hansen, Ivan Dahl	Fisher's Island, N. Y.
Hopkins, George Leonard	North Scituate.
Johnson, William Plimpton	Medfield, Mass.
Jones, Everett Ellsworth	Peace Dale.
Lawless, William	Peace Dale.
Mays, William Clarke Stevens	Edgewood.
Meyer, Jacob John	McKees Rocks, Penn.
Osgood, Joseph	North Beverly, Mass.
Sanderson, Robert Alexander	Stoughton, Mass.
Swan, William Cannon	Newport.
Watts, Wallace Parker	Littleton Common, Mass.
Wilson, Earl Stanton	Hammond, N. Y.
Winn, Wesley Preston	Windsor, Vt.

Total number of students (none counted twice) 142

Graduates.*

1894.

NAME AND ADDRESS.	COURSE.	OCCUPATION.
ADAMS, GEORGE EDWARD Kingston.	Agr.	Associate, Agronomy, R. I. Agr. Experiment Station.
AMMONDS, GEORGE CLARENCE 5 Boylston Place, Boston, Mass.	Mech.	Railroad Postal Clerk, on N. Y., N. H. & H. R. R.
ARNOLD, CHAPIN TRAFFORD 52 Wood St., Providence.	Agr.	Electrical Contractor, Office 283 Westminster St., Room 10, Providence.
BURLINGAME, GEORGE WASHINGTON. Sturbridge, Mass.	Agr.	Bookkeeper, American Optical Co., Lonsdale, Mass.
CLARK, HELEN MAY B. L., Smith College, 1899. 12 East 70 St., N. Y. City.		Private Secretary.
KNOWLES, JOHN FRANKLIN Kingston.	Mech.	Assistant Wood-Working Dept., R. I. C. A. & M. A.
MADISON, WARREN BROWN Intervale, N. H.	Agr.	Farm Superintendent, Stonehurst Farm.
MATHEWSON, ERNEST HOXSIE Ph. B., Brown University, 1896. West Appomattox, Va.	Mech.	Tobacco Expert, U. S. Department of Agriculture.
PECKHAM, REUBEN WALLACE Melville Station, Newport.	Agr.	Market Gardener.
RATHBUN, WILLIAM SHERMAN Wakefield.	Agr.	Practicing Veterinary.
RODMAN, GEORGE ALBERT New Haven, Conn.	Mech.	Division Engineer's Office, N. Y., N. H. & H. R. R. Co.
SARGENT, CHARLES LAWRENCE Ph. D., University of Pennsylvania, 1900. Newark, New Jersey.	Agr.	Chemist, Murphy Varnish Co.
SLOCUM, SAMUEL WATSON 130 West Broad St., Westerly.	Agr.	Carpenter.
SPEARS, JOHN BARDEN South Scituate, R. F. D.	Agr.	Farmer.

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*It is earnestly desired that the graduates inform the Alumni Bureau of any permanent change of address.

NAME AND ADDRESS.	COURSE.	OCCUPATION.
Sweet, Stephen Adelbert Slocums.	Agr.	Farmer.
Tucker, George Mason Ph. D., Göttingen, 1899. Blodgett, Missouri.	Agr.	Proprietor, Plant-Breeding Farm.
Wilber, Robert Arthur East Greenwich.	Mech.	Express Agent.

1895.

NAME AND ADDRESS.	COURSE.	OCCUPATION.
Albro, Lester Franklin Melville Station, Newport.	Agr.	Professional Singer.
Burdick, Howland Kingston.	Agr.	Farm Superintendent, R. I. C. A. & M. A.
Clarke, Charles Sherman Jamestown.	Mech.	Marine Engineer.
Eldred, Mabel DeWitt Kingston.		Instructor in Drawing, R. I. C. A. & M. A.
Hammond, John Edward Jamestown.	Agr.	Farmer.
Oatley, Lincoln Nathan Wakefield.	Mech.	Contractor and Builder.
Scott, Arthur Curtis Ph. D., Univ. of Wisconsin, 1902. Austin, Texas.	Mech.	Professor of Electrical Engineering, Univ. of Texas.
Tefft, Jesse Cottrell Jamestown.	Mech.	Purser, Newport and Jamestown Ferryboat Co.
Winsor, Byron Edgar Coventry.	Mech.	Poultryman.

1896.

NAME AND ADDRESS.	COURSE.	OCCUPATION.
Brown, May (Mrs. Charles A. White). Narragansett Pier.		At home.
Greenman, Adelaide Maria (Mrs. R. Wallace Peckham) Melville Station, Newport.		At home.
Kenyon, Albert Lewis 210 Rochambeau Ave., Providence.	Mech.	Printer, Silver Spring Bleaching and Dyeing Co.
Moore, Nathan Lewis Cass Oneco, Florida.	Agr.	Fruit-Grower, with Royal Palm Nurseries.
Tabor, Edgar Francis 69 Doyle Ave., Providence.	Mech.	Calico Printer, Silver Spring Bleaching and Dyeing Co.
*Williams, James Emerson	Agr.	

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*Deceased.

1897.

NAME AND ADDRESS.	COURSE.	OCCUPATION.
Carmichael, Welcome Sands Shannock.	Sci.	Bookkeeper, Providence Journal Co., Providence.
Case, Herbert Edwards Brown Ph. B., Brown University, 1900. Graduate, Hartford Theological Seminary, 1904.	Mech.	Missionary, Marianas, Island of Guam, U. S. A.
Grinnell, Archie Franklin 85 Ninth St., Providence.	Mech.	Draughtsman, Brown and Sharpe Mfg. Co.
Hanson, Gertrude Maie Usquepaugh.	Sci.	Teacher.
Hoxsie, Bessie Bailey (Mrs. E. F. Rueckert) 98 Melrose St., Providence.	Sci.	At home.
Kenyon, Albert Prentice 10 West St., Westerly.	Mech.	Bookkeeper, Maxson & Co., Westerly.
Kenyon, Charles Franklin Shannock.	Mech.	Asst. Supt., Geneva Woolen Mill, Providence.
Larkin, Jessie Louise 98 Beach St., Westerly.	Sci.	Stenographer.
Marsland, Louis Herbert 2512 North 34th St., Philadelphia, Pa.	Mech.	Assistant Engineer, Phila. Rapid Transit Co.
Tefft, Eliza Alice 16 Rocket St., Westerly.	Sci.	Teacher, East Greenwich.
Thomas, Irving Allenton.	Mech.	Designer of Patterns.

1898.

NAME AND ADDRESS.	COURSE.	OCCUPATION.
Arnold, Sarah Estelle (Mrs. R. O. Brooks) 191 Franklin St., New York City.	Sci.	At home.
Barber, George Washington East Greenwich.	Agr.	Clerk.
Cargill, Edna Maria (Mrs. Lester H. Brown) 80 Maynard St., Pawtucket.	Sci.	At home.
Case, John Peter 26 Courtland St., New York City.	Agr.	With Brown Hoisting Machinery Company.
Clark, William Case Wakefield.	Sci.	Secretary, Sea-View Electric Railroad.
Congdon, Henry Augustus Kingston.	Mech.	Farmer.
Flagg, Martha Rebecca Hardwick, Mass.	Sci.	At home.

NAME AND ADDRESS.	COURSE.	OCCUPATION.
Harley, William Ferguson 62 Hillside Avenue, Providence.	Agr.	Salesman, with Messrs. Callender, McAuslan & Troup, Providence.
Turner, Harriette Florence (Mrs. Geo. M. Tucker) Graduate, Drexel Institute, 1900, Blodgett, Missouri.	Sci.	At home.
Wilson, Grace Ellen (Mrs. W. F. Harley) 62 Hillside Avenue, Providence.	Sci.	At home.

1899.

Bosworth, Alfred Willson Geneva, N. Y.	Sci.	Assistant, Research in Dairy Chemistry, N. Y. Agr. Exp. Sta.
Brooks, Ralph Ordway 191 Franklin St., New York City.	Sci.	Director and Chief Chemist, Official Testing Laboratory.
George, Lillian Mabelle A. B., Univ. Ill., 1904. Kingston.	Sci.	Librarian, R. I. C. A. & M. A.
Harvey, Mildred Wayne 42 W. 93d St., New York City.	Sci.	Private Secretary.
Kenyon, Blydon Ellery Austin, Texas.	Agr.	Instructor in Electrical Engineering, University of Texas.
Knowles, Carroll 127 Hamilton St., Providence.	Mech.	Draughtsman, Brown & Sharpe Mfg. Co.
Knowles, Harry Ph. B., Brown University, 1906. 19 East Park St., Newark, N. J.	Sci.	Reporter, Newark Sunday Call.
Ladd, Merrill Augustus 304 No. Boulevard, Atlanta, Ga.	Mech.	Commercial Representative for Florida and Georgia, General Electric Co.
Morrison, Clifford Brewster 543 Broad St., Providence.	Sci.	Chemist, City Sewerage Dept.
Owen, William Frazier Schenectady, N. Y.	Mech.	Engineering Dept., General Electric Co.
Payne, Ebenezer M. D., Univ. Michigan, 1904. Great Barrington, Mass.	Sci.	Physician and Surgeon.
Phillips, Walter Clarke Ph. B., Brown University, 1902. A. M., Brown University, 1903. 28 Caswell Hall, Providence.	Mech.	Instructor in English, Brown University.
Reynolds, Robert Spink Room 314, Gen. Office Bldg., New Haven, Conn.	Mech.	Asst. Engineer, Bridge Dept. N. Y., N. H. & H. R. R. Co.

NAME AND ADDRESS.	COURSE.	OCCUPATION.
Rice, Minnie Elizabeth (Mrs. Robert J. Sherman) Lafayette.	Sci.	At home.
Sherman, Abbie Gertrude (Mrs. Benjamin Barton) 56 Pavilion Ave., Providence.	Sci.	At home.
Sherman, George Albert West Kingston.	Mech.	Insurance Agent.
Thompson, Sally Rodman (Mrs. Lewis Balch) Kingston.	Sci.	At home.

1900.

NAME AND ADDRESS.	COURSE.	OCCUPATION.
Brightman, Henry Maxson 410 Murray Bldg., Grand Rapids, Mich.	Mech.	Firm of Bending, Bicknell and Brightman, Engineering and Construction.
Cross, Charles Clark North Tarrytown, N. Y.	Mech.	Head Inspector, Maxwell-Briscoe Motor Co.
Eldred, John Raleigh Lincoln Hall, Ithaca, N. Y.	Mech.	Instructor in Civil Engineering, Cornell University.
Fison, Gertrude Sarah 784 Prospect Place, Brooklyn, N. Y.	Sci.	Children's Librarian, Brooklyn Public Library, 234 Albany Ave., Brooklyn.
Fry, John Joseph A. B., Oberlin, 1904. Glenbrook, Conn.	Mech.	Principal, Darien Public School.
Goddard, Edith Campello, Mass.	Sci.	Teacher, High School, Hopedale, Mass.
Kenyon, Amos Langworthy White Plains, N. Y.	Agr.	Dairyman, Gedney Farm.
Munro, Arthur Earle Ph. B., Brown University, 1902. 714 Industrial Trust Bldg., Providence.	Sci.	Lawyer.
Soule, Ralfh Nelson East Greenwich.	Sci.	Student, 201 E. St. N. W., Washington, D. C.
Steere, Anthony Enoch Room No. 67, De Graaf Bldg., Albany, N. Y.	Mech.	Assistant Civil Engineer, Erie Canal.
Stillman, Lenora Estelle 443 Bleecker St., Brooklyn, N. Y.	Sci.	Teacher.
Tucker, Bertha Douglass Swansea Centre, Mass.	Sci.	Dressmaker.
Wheeler, Charles Noyes 97 Garden Street Pawtucket.	Sci.	Clerk, Wm. H. Haskell Manufacturing Co.

NAME AND ADDRESS.	COURSE.	OCCUPATION.
Wilson, Joseph Robert Belleville.	Mech.	In Woolen Mills, J. P. Campbell.

1901.

Brayton, Charles Andrew Fiskeville.	Agr.	Farmer.
Briggs, Nellie Albertine Providence.	Sci.	Stenographer, R. I. Hospital Trust Co.
Burgess, Charles Stuart 264 Sayles St., Providence.	Mech.	Draughtsman, Brown & Sharpe Mfg. Co.
Clarner, Louis George Karl, Jr. Arnold's Mills.	Sci.	Farmer.
Dawley, Edna Ethel Kenyon.	Sci.	Teacher.
Denico, Arthur Albertus Narragansett Pier.	Sci.	Electrician, 209 W. 108th St., N. Y. City.
*James, Ruth Hortense (Mrs. Herbert E. Rouse)	Sci.	
Sherman, Anna Brown 122 Fountain St., Providence.	Sci.	Stenographer, with Harness & Saddlery Co., Washington St.
Sherman, Elizabeth Agnes 41 Milk St., Boston, Mass.	Sci.	Stenographer, with Whitehall Portland Cement Co.
Smith, Howard Dexter A. M., Brown University, 1904. Ph. D., Tufts College, 1906. Beloit, Wisconsin.	Sci.	Instructor in Chemistry, Beloit College.
Steere, Roena Hoxsie 98 Fifield St., Providence.	Sci.	Stenographer, with Anthony & Cowell Co.
Wilby, John Flat River, Missouri.	Sci.	Supply Clerk, Central Lead Co.

1902.

Clarke, Latham A. M., Brown University, 1903. Ph. D., Harvard University, 1905. Boylston Hall, Cambridge, Mass.	Chem.	Instructor in Chemistry, Harvard University.
Ferry, Oliver Needham 8 Armington Ave., Providence.	Mech.	Head Draughtsman, D. & W. Fuse Co.
Maxson, Ralph Nelson Ph. D., Yale University, 1905. 522 Rose St., Lexington, Kentucky.	Chem.	Assistant Professor in Chemistry, Kentucky State College.
Pitkin, Robert William Rockville, Conn., R. F. D. No. 1.	Mech.	Farmer.

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*Deceased.

1903.

NAME AND ADDRESS.	COURSE.	OCCUPATION.
Barber, Kate Grace Ph. D., Yale University, 1906. 123 Huntington St., New Haven, Conn.	Gen. Sci.	Chemist, Conn. Exp. Station.
Conant, Walter Aiken Bonnymeade Farm, Manchester, Me.	Agr.	Sanitary Milk and Cream Co.
Goddard, Warren 48 Quincy St., Cambridge, Mass.	Mech.	Student, New Church Theological School, Cambridge, Mass.
Keefer, Edith Cecelia 13 Poplar St., Providence.	Biol.	Teacher of Science, Des Moines High School.
Kent, Raymond Warren A. M., Harvard University, 1904. Akron, Ohio.	Chem.	Chemist, Diamond Rubber Co.
Tefft, Ernest Allen Broadway, Providence.	El. Eng.	Electrician.

1904.

NAME AND ADDRESS.	COURSE.	OCCUPATION.
Ballou, Willard Alger Wellsville, Ohio.	Biol.	Asst. Principal, High School.
Quinn, Mary Louise Mason City, Iowa.	Biol.	Teacher of Natural Sciences, High School.
Rodman, Walter Sheldon Kingston.	El. Eng.	Instructor in Physics and Electrical Engineering, R. I. C. A. & M. A.

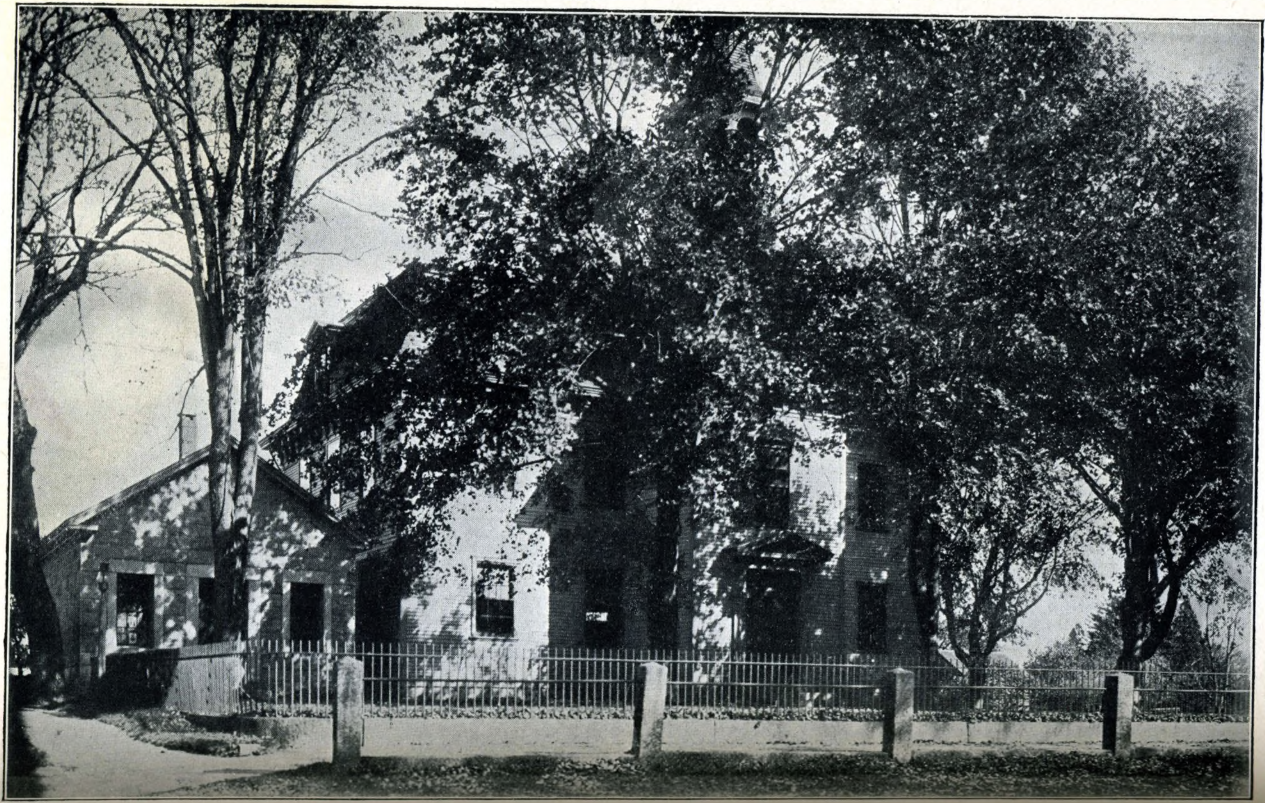
1905.

NAME AND ADDRESS.	COURSE.	OCCUPATION.
Champlin, Sarah Elizabeth 30 Cherry St., Providence.	Gen. Sci.	In Office of the Burt Mfg. Co., 226 Eddy St.
Dow, Victor Wells 2001 G St., Washington, D. C.	High. Eng.	Junior Asst. Engineer, Office of Good Roads Department of Agriculture.
Gilman, Jean Hampton, Virginia.	High. Eng.	Assistant to Director of Trade School, Hampton Institute.
Harrall, Nellie Armstrong Wakefield.	Gen. Sci.	At home.

1906.

NAME AND ADDRESS.	COURSE.	OCCUPATION.
Arnold, Benjamin Howard Boston, Mass.	El. Eng.	Graduate Student, Massachusetts Institute of Technology.
Berry, Wallace Noyes Detroit, Michigan.	El. Eng.	Teacher, Electrical Engineering, Y. M. C. A. Institute.
Elkins, Marion Graham 10 Moody St., Amesbury, Mass.	Gen. Sci.	At home.

NAME AND ADDRESS.	COURSE.	OCCUPATION.
HARDING, LEE LAPLACE 58 Georgiana St., New London, Conn.	High. Eng.	Instructor in Mathematics and Science, Manual Training and Industrial School.
KEYES, FREDERICK GEORGE Brown University, Providence.	Chem.	Graduate Student, Brown Univ.
NICHOLS, HOWARD MARTIN 10 Anoka Place, Lynn, Mass.	El. Eng.	In Testing Dept., General Electric Co.
SISSON, CORA EDNA Wickford.	Gen. Sci.	Teacher.
WILKINSON, ALBERT EDMUND Woodbine, New Jersey.	Agr.	Horticulturist, Baron de Hirsch Agricultural School.



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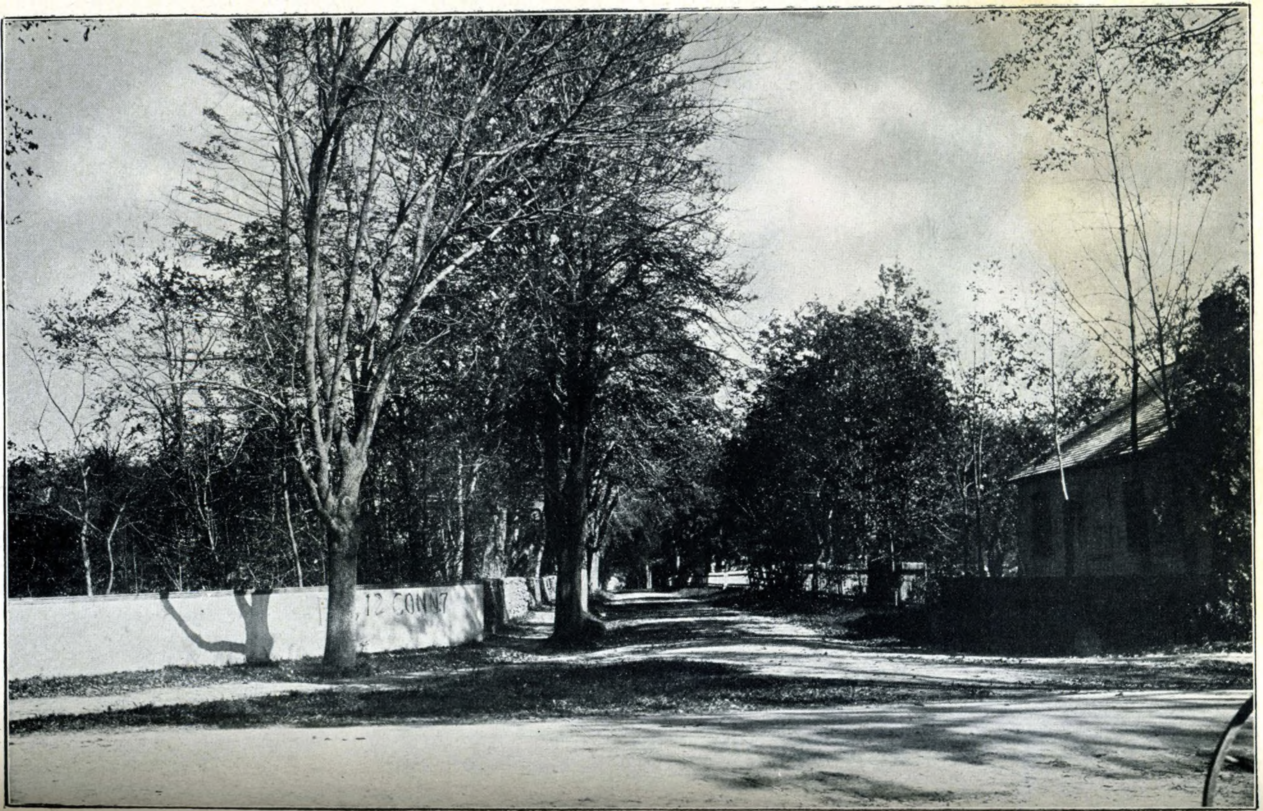

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